

STATE OF KANSAS

DEPARTMENT OF HEALTH AND ENVIRONMENT DIVISION OF ENVIRONMENT

Hazardous Waste Management Facility Permit Part I

In accordance with the provisions of Kansas Statutes Annotated 65-3430 et. seq. permission is hereby granted to:

Facility Name: Occidental Chemical Corporation

Operator: Occidental Chemical Corporation

Owner: Occidental Chemical Corporation

Location: 6200 South Ridge Road
Wichita, Kansas 67215

E.P.A. Identification Number: KSD007482029

for hazardous waste storage in containers.

This permit (Part I) is being issued in accordance with rules and regulations of the Department of Health and Environment and the following-named conditions and requirements to wit: The Permittee must comply with all terms and conditions in Section I through Section V of this permit. The permit consists of the conditions contained herein, including those in any attachments, the permit application and all applicable hazardous waste regulations contained in K.A.R. 28-31-1 through 28-31-16 in effect on the date of issuance of this permit. This permit shall remain in effect even if the Hazardous and Solid Waste Amendments permit (Part II) is terminated or expired.

This permit shall become effective at 12:01 a.m. on August 30, 2007 and shall remain in effect until August 30, 2017 unless revoked and reissued, or terminated or continued in accordance with K.A.R. 28-31-9.

Done at Topeka, this 25th day of July, 2007

465055



RCRA RECORDS



Roderick L. Bremby, Secretary
Kansas Department of Health and Environment

**HAZARDOUS WASTE FACILITY PERMIT
OCCIDENTAL CHEMICAL CORPORATION
WICHITA, KANSAS
EPA I.D. #KSD 007482029**

TABLE OF CONTENTS

PART I

SECTION I - STANDARD PERMIT CONDITIONS

Page

I.A.	EFFECT OF PERMIT	1
I.B.	PERMIT ACTION.....	1
I.C.	SEVERABILITY	2
I.D.	DEFINITIONS.....	2
I.E.	DUTIES AND REQUIREMENTS.....	2
I.F.	SIGNATORY REQUIREMENT	7
I.G.	WASTE MINIMIZATION.....	7
I.H.	REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE SECRETARY	8
I.I.	CONFIDENTIAL INFORMATION	8
I.J.	DOCUMENTS TO BE MAINTAINED AT THE FACILITY	8
I.K.	PENALTIES	9

SECTION II - GENERAL FACILITY CONDITIONS

II.A.	DESIGN AND OPERATION OF THE FACILITY	10
II.B.	REQUIRED NOTICE.....	10
II.C.	GENERAL WASTE ANALYSIS	10
II.D.	SECURITY	10
II.E.	GENERAL INSPECTION REQUIREMENTS.....	10
II.F.	PERSONNEL TRAINING	11
II.G.	LOCATION STANDARDS	12
II.H.	SPECIAL PROVISIONS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE	12
II.I.	PREPAREDNESS AND PREVENTION.....	12
II.J.	CONTINGENCY PLAN	13
II.K.	RECORDKEEPING AND REPORTING	13
II.L.	GENERAL CLOSURE REQUIREMENTS.....	14
II.M.	FINANCIAL REQUIREMENTS	16

SECTION III - STORAGE IN CONTAINER

III.A.	DESCRIPTION OF STORAGE FACILITIES.....	17
III.B.	PERMITTED AND PROHIBITED WASTE IDENTIFICATION.....	17
III.C.	OPERATIONS AND MAINTENANCE.....	17
III.D.	CONTAINER STORAGE FACILITY CAPACITIES.....	18
III.E.	CONDITION OF CONTAINERS.....	18

TABLE OF CONTENTS (cont.)

III.F. COMPATIBILITY OF WASTE WITH CONTAINERS.....	18
III.G. MANAGEMENT OF CONTAINERS	18
III.H. INSPECTION SCHEDULE AND PROCEDURES.....	18
III.I. CONTAINMENT SYSTEMS	19
III.J. SPECIAL CONTAINER PROVISIONS FOR IGNITABLE OR REACTIVE	19
III.K. SPECIAL PROVISIONS FOR INCOMPATIBLE WASTE	19
III.L. RECORDKEEPING	19
III.M. CLOSURE	19

SECTION IV - CLOSURE OF TANKS

IV.A. DESCRIPTION OF TANK SYSTEM.....	20
IV.B. CLOSURE AND POST-CLOSURE CARE.....	20

SECTION V - UNDERGROUND INJECTION CONTROL WELLS

V.A. DESCRIPTION OF UNDERGROUND INJECTION CONTROL WELLS	21
V.B. PERMIT BY RULE PROVISIONS FOR UIC WELLS	21

SECTION VI - AIR EMISSION STANDARDS

VI.A. AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS (SUBPART BB).....	22
VI.B. AIR EMISSION STANDARDS FOR TANKS AND CONTAINERS (SUBPART CC).....	25

ATTACHMENT A

PERMITTED WASTE FOR CONTAINER STORAGE

SECTION I - STANDARD PERMIT CONDITIONS

I.A. EFFECT OF PERMIT

Occidental Chemical Corporation, owner and operator, herein referred to as the Permittee, is permitted to store hazardous waste in accordance with the conditions of this Permit and K.A.R. 28-31-4. Any treatment, storage or disposal of hazardous waste not authorized in this Permit is strictly prohibited. This Permit consists of the conditions contained herein, including those in any attachments; as the approved Permit Application (Part A and Part B); and the applicable regulations contained in 40 CFR Parts 124, 260 through 264, 268, and 270. Applicable regulations are those in effect on the date of issuance of this Permit. [40 CFR 270.32(c)] The federal regulations are adopted by reference in Kansas Administrative Regulations (K.A.R.) 28-31-1 through 28-31-16. All citations to federal regulations are for the sake of convenience. In situations where state regulations differ from the federal ones, they are also referenced and take precedence.

Subject to 40 CFR 270.4, compliance with this Permit constitutes compliance, for purposes of enforcement, with K.S.A. 65-3430 et seq. and K.A.R. 28-31-1 through 28-31-16 and Subtitle C of the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA). Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations. Compliance, with the terms of this Permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 106(a), 104, or 107 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. 9606 et seq., commonly known as CERCLA), or any other law providing for the protection of public health or the environment. [40 CFR 270.4, 270.30(g)]

I.B. PERMIT ACTIONS

I.B.1. Permit Modification, Revocation and Reissuance, and Termination

This Permit may be modified, revoked and reissued, or terminated for cause, as specified in 40 CFR 270.41, 270.42, and 270.43. If cause exists, the Secretary may modify or revoke and reissue this Permit in accordance with 40 CFR 270.41. When this Permit is modified, only the conditions subject to the modification are reopened. If this Permit is revoked and reissued, the entire Permit is reopened and subject to revision, and may be reissued for a new term.

The Secretary will, upon request by the Permittee, approve or deny modifications to this Permit in accordance with 40 CFR 270.42. The modification will become an enforceable part of this Permit. The filing of a request for permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated

noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any Permit condition. [40 CFR 270.4(a) and 270.30(f)]

I.B.2. Permit Renewal

This Permit may be renewed as specified in 40 CFR 270.30(b) and Permit Condition I.E.2. Review of any application for a Permit renewal shall consider improvements in the area of control and measurement technology, as well as changes in applicable regulations. [40 CFR 270.30(b), HSWA Sec.212]

I.C. SEVERABILITY

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby. [40 CFR 124.16(a)]

I.D. DEFINITIONS

For purposes of this Permit, terms used herein shall have the same meaning as those in K.S.A. 65-3430 and K.A.R. 28-31-1 and 28-31-2, and in 40 CFR Parts 124, 260, 262, 264, 266, 268, and 270, unless this Permit specifically provides otherwise. When the same word is defined in the Kansas statutes or regulations and in the federal regulations and the definitions are not identical, the definition in the Kansas statutes or regulations shall control [K.A.R. 28-31-2(f)]. "Secretary" means the Secretary of the Kansas Department of Health and Environment (KDHE), or a designee or authorized representative of KDHE.

Where terms are not defined in the regulations or the Permit, the meaning associated with such terms shall be defined by standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

I.E. DUTIES AND REQUIREMENTS

I.E.1. Duty to Comply

The Permittee must comply with all conditions of this Permit, except as to the extent and for the duration such noncompliance is authorized by an emergency permit (See 270.61). Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application. [40 CFR 270.30(a)]

I.E.2. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee shall submit a complete application for a new permit at least one hundred and eighty (180) days before this Permit expires, unless permission for a later submission date has been granted by the Secretary. [40 CFR 270.10(h), 270.30(b)]

I.E.3. Permit Expiration

Pursuant to 40 CFR 270.50, this Permit shall be effective for a fixed term not to exceed ten (10) years. As long as KDHE is the permit-issuing authority, this Permit and all conditions herein will remain in effect beyond the Permit's expiration date, if the Permittee has submitted a timely, complete application (see 40 CFR 270.10, 270.13 through 270.29) and, through no fault of the Permittee, the Secretary has not issued a new Permit, as set forth in 40 CFR 270.51.

I.E.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.[40 CFR 270.30(c)]

I.E.5. Duty to Mitigate

In the event of noncompliance with the Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. [40 CFR 270.30(d)]

I.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Permit. [40 CFR 270.30(e)]

I.E.7. Duty to Provide Information

The Permittee shall furnish to the Secretary, within a time period specified by the Secretary, any relevant information which the Secretary may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Secretary, upon request, copies of records required to be kept by this Permit. [40 CFR 264.74(a), 270.30(h)]

I.E.8. Inspection and Entry

Pursuant to 40 CFR 270.30(i) and K.A.R. 28-31-12, the Permittee shall allow the Secretary, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

- I.E.8.a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;
- I.E.8.b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- I.E.8.c. Inspect and photograph at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- I.E.8.d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

I.E.9. Monitoring and Records

- I.E.9.a. Pursuant to 40 CFR 270.30(j)(1), samples and measurements taken, to comply with this Permit, for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the medium to be analyzed for a given hazardous constituent must be the appropriate method from Appendix I of 40 CFR Part 261 or equivalent method approved by the Secretary. The chemical analysis must be those specified in EPA Publication SW-846, "Test Methods for Evaluating Solid Waste, Physical/Chemical Method." The analytical method to be followed must comply with the latest revisions and amendments to SW-846. All constituent chemical analysis shall be performed by a laboratory certified by KDHE in accordance with K.A.R. 28-31-8(f).

I.E.9.b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this Permit, the certification required by 40 CFR 264.73(b)(9), and records of all data used to complete the application for this Permit, for a period of at least three (3) years from the date of the sample, measurement, report, or certification of application. This period may be extended by request of the Secretary at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility. [40 CFR 264.74(b) and 270.30(j)(2)]

I.E.9.c. Records of monitoring information shall specify:

- i. The dates, exact place, and times of sampling or measurements;
- ii. The individual(s) who performed the sampling or measurements;
- iii. The dates analyses were performed;
- iv. The individual(s) who performed the analyses;
- v. The analytical techniques or methods used; and
- vi. The results of such analyses;

I.E.10. Reporting Planned Changes

The Permittee shall give notice to the Secretary twenty (20) days prior to any planned physical alterations or additions to the permitted facility. The replacement of worn or broken parts need not be reported as long as replacement is with an equivalent component which does not adversely affect the designed operating procedures or performance of the facility. [40 CFR 270.30(l)(1)]

I.E.11. Reporting Anticipated Noncompliance

The Permittee shall give notice to the Secretary twenty (20) days prior to any planned changes in the permitted facility or activity which may result in noncompliance with Permit requirements. [40 CFR 270.30(l)(2)]

I.E.12. Transfer of Permit

This Permit is not transferable to any person, except after notice to the Secretary. The Secretary may require modification or revocation and reissuance of the Permit pursuant to 40 CFR 270.40. Before transferring ownership or operation of the facility during the

operating life, the Permittee shall notify the new owner or operator in writing of the requirements of K.A.R. 28-31-9, 40 CFR Parts 264 and 270, and this Permit. [40 CFR 270.30(l)(3) and 264.12(c)]

I.E.13. Twenty-four Hour Reporting

I.E.13.a. Pursuant to 40 CFR 270.30(l)(6), the Permittee shall report to the Secretary any noncompliance with the Permit which may endanger health or the environment. Any such information shall be reported orally within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. The report shall include the following:

- i. Information concerning release of any hazardous waste which may cause an endangerment to public drinking water supplies; and
- ii. Any information of a release or discharge of hazardous waste or of a fire or explosion from the hazardous waste management facility, which could threaten the environment or human health outside the facility.

I.E.13.b. The description of the occurrence and its cause shall include:

- i. Name, address, and telephone number of the owner or operator;
- ii. Name, address, and telephone number of the facility;
- iii. Date, time, and type of incident;
- iv. Name and quantity of materials involved;
- v. The extent of injuries, if any;
- vi. An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and
- vii. Estimated quantity and disposition of recovered material that resulted from the incident.

I.E.13.c. A written submission shall also be provided within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Secretary may waive the five-day written notice

requirement in favor of a written report within fifteen (15) days. [40 CFR 270.30(l)(6)]

I.E.14. Other Noncompliance

The Permittee shall report all instances of noncompliance not otherwise required to be reported above in Permit Conditions I.E.9 thru 13, at the time monitoring reports are submitted. The reports shall contain the information listed in Permit Condition I.E.13 of this section. [40 CFR 270.30(l)(10)]

I.E.15. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the Permit application, or submitted incorrect information in an application or in any report to the Secretary, the Permittee shall promptly submit such facts or information. [40 CFR 270.30(l)(11)]

I.E.16. Other Requirements

I.E.16.a. The Permittee shall defend, indemnify, and hold harmless the State of Kansas, its officers, agents, and employees, officially or personally, against all actions, claims, and demands whatsoever which may arise from or on account of the issuance of this Permit or the construction or maintenance of any facilities hereunder.

I.E.16.b. Within thirty (30) calendar days after receipt of the final Permit, the Permittee shall submit a certification that the applicant has read the Permit in its entirety and understands all the Permit Conditions contained herein and agrees to operate the hazardous waste storage facility within the conditions of this Permit.

I.F. SIGNATORY REQUIREMENT

All applications, reports or other information submitted to or requested by the Secretary, a designee, or authorized representative, shall be signed and certified in accordance with 40 CFR 270.11 and 270.30(k).

I.G. WASTE MINIMIZATION

I.G.1. Pursuant to 40 CFR 264.73(b)(9), and Section 3005(h) of RCRA, 42, USC 6925(h), the Permittee must record and maintain in the facility operating record, at least annually, a waste minimization certification that

I.G.1.a. Specifies the Permittee has a program in place to reduce the volume and toxicity of all hazardous waste and/or hazardous constituents generated by the facility's

operation to the degree determined by the Permittee to be economically practicable; and

I.G.1.b. The proposed method of treatment, storage or disposal is the practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment.

I.G.2. The Permittee shall maintain copies of this certification and supporting documents in the facility operating record as required by Permit Condition I.J.4. and 40 CFR 264.73(b)(9).

I.H. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE SECRETARY

One copy (1) of all reports, notifications, or other submissions which are required by this Permit shall be reported or sent directly to the following:

**Chief of the Hazardous Waste Permits Section
Kansas Department of Health and Environment
Bureau of Waste Management
1000 SW Jackson, Suite 320
Topeka, Kansas 66612-1366
Telephone Number (785) 296-1600**

In addition, one (1) copy of all reports, notifications or other submissions shall be submitted to:

**U.S. Environmental Protection Agency Region 7
Attn: Chief, RCRA Corrective Action and Permits Branch
Air, RCRA, and Toxics Division
901 N. 5th Street
Kansas City, Kansas 66101**

I.I. CONFIDENTIAL INFORMATION

In accordance with 40 CFR 270.12 and K.S.A. 65-3447, the Permittee may claim confidential any information required to be submitted by this Permit. This claim must be asserted at the time of submission.

I.J. DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittee shall maintain at the facility, until the final closure is complete and certified by an independent registered professional engineer licensed to practice in Kansas, the following documents and amendments, revisions and modifications to these documents:

- I.J.1. A copy of this Permit, including all approved permit modifications.
- I.J.2. A copy of the Part A and Part B Permit Application including, but not limited to the following:
 - I.J.2.a. Waste Analysis Plan, as required by 40 CFR 264.13 and this Permit.
 - I.J.2.b. Inspection schedules and documents, as required by 40 CFR 264.15(b) and this Permit.
 - I.J.2.c. Contingency Plan, as required by 40 CFR 264.53(a) and this Permit.
 - I.J.2.d. Closure Plan, as required by 40 CFR 264.112(a) and this Permit.
- I.J.3. Personnel training documents and records as required by 40 CFR 264.16(d) and (e) and this Permit. The training records on former employees must be kept for at least five (5) years from the date the employee last worked at the facility.
- I.J.4. Operating record, as required by 40 CFR 264.73 and this Permit.
- I.J.5. Annually adjusted cost estimate for facility closure as required by 40 CFR 264.142(d) and this Permit.
- I.J.6. All other documents required by Permit Condition I.E.9.

I.K. PENALTIES

Failure to comply with the terms of this Permit may subject the Permittee to an administrative and/or civil penalty, a criminal penalty and/or an action to suspend or revoke this Permit. Failure to minimize or mitigate any adverse impact on the environment resulting from noncompliance may serve to increase the severity of such penalties. [K.S.A. 65-3444 and 65-3446]

SECTION II - GENERAL FACILITY CONDITIONS

II.A. DESIGN AND OPERATION OF FACILITY

The Permittee shall design, construct, maintain, and operate the facility to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment (40 CFR 264.31). This includes adherence to operating conditions and procedures, and emergency shutdown procedures specified in the permit application and in this Permit.

II.B. REQUIRED NOTICES

Before transferring ownership or operation of the facility during its operating life, the owner or operator must notify the new owner or operator in writing of the requirements of K.A.R. 28-31-9(b), 40 CFR Parts 264 and 270, and this Permit. [40 CFR 264.12(c)]

II.C. GENERAL WASTE ANALYSIS

The Permittee shall follow the waste analysis procedures required by 40 CFR 264.13, as described in the Waste Analysis Plan - Section C of the Part B Application.

The Permittee shall verify the analysis of each waste stream as part of its quality assurance program, in accordance with Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, EPA Publication SW-846, or equivalent methods approved by the Secretary. At a minimum, the Permittee shall maintain proper functioning instruments, use approved sampling and analytical methods, verify the validity of sampling and analytical procedures, and perform correct calculations. If the Permittee uses a contract laboratory to perform the analyses, then the Permittee shall inform the laboratory in writing that it must operate under the waste analysis conditions set forth in this Permit. A copy of the written notification between the Permittee and its contract laboratory must be maintained at the facility for at least three (3) years from the date of such notification.

II.D. SECURITY

The Permittee shall comply with the security provisions of 40 CFR 264.14(b)(2) and (c) and Section F-1 (Security) within Procedure to Prevent Hazards, Section F of the Part B Permit Application.

II.E. GENERAL INSPECTION REQUIREMENTS

The Permittee shall follow the inspection schedule set out in Section F-2 (Inspection Schedule) within Procedures to Prevent Hazards, Section F of the Part B Permit Application. The Permittee shall remedy any deterioration or malfunction discovered by an inspection, as required by 40 CFR 264.15(c). Records of inspection shall be kept, as required by 40 CFR 264.15(d).

II.E.1. Inspection for Malfunctions and Deterioration

The Permittee shall inspect the facility as required by 40 CFR 264.15 and the Inspection Schedule, Section F-2 of the Part B Permit Application for malfunctions and deterioration, operator errors and discharges which may be causing or may lead to (1) release of hazardous waste constituents to the environment, or (2) a threat to human health.

II.E.2. Schedule of Inspections

The Permittee shall follow the written schedule in the Inspection Schedule, Section F-2 of the Part B Permit Application for the inspection of monitoring and remediation equipment, safety and emergency equipment, security devices, and operating, remediation, and structural equipment that are for the purpose of preventing, detecting, or responding to environmental or human health hazards. The Permittee shall keep this schedule at the facility.

II.E.3. Records of Inspections

The Permittee shall record inspections required by Permit Condition II.E.2. in an inspection log or summary. The log or summary shall be kept for at least three (3) years from the date of inspection. At a minimum, the items to be inspected must include those identified in the inspection plan contained in Section F-2 of the Part B Permit Application. The logs must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

II.E.4. Remedial Action Resulting from Inspections

The Permittee shall remedy any observed deterioration or malfunction of equipment or structures to ensure that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

II.F. PERSONNEL TRAINING

The Permittee shall conduct personnel training as required by 40 CFR 264.16. This training shall be in accordance with Personnel Training, Section H of the Part B Permit Application. The Permittee shall maintain training documents and records, as required by 40 CFR 264.16(d) and (e).

II.G. LOCATION STANDARDS

The facility is not located within a 100-year flood plain, therefore is not required to meet the requirements of 40 CFR 264.18(b)(1). In addition, the facility is located in Sedgwick County, Kansas, which is not listed in Appendix VI of 40 CFR 264. Thus, no specific location standards apply to this facility.

II.H. SPECIAL PROVISIONS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

The Permittee shall comply with the requirements of 40 CFR 264.17(a). The Permittee shall follow the procedures for handling ignitable, reactive, and incompatible wastes set forth in Section F-5 of the Part B Permit Application.

II.I. PREPAREDNESS AND PREVENTION

II.I.1. Required Equipment

At a minimum, the Permittee shall maintain at the facility the safety and emergency equipment set forth in Procedures to Prevent Hazards, Section F of the Part B Permit Application, as required by 40 CFR 264.32.

II.I.2. Testing and Maintenance of Equipment

The Permittee shall test and maintain the equipment specified in Permit Condition II.H.1, as necessary, to assure its proper operation in time of emergency, as required by 40 CFR 264.33.

II.I.3. Access to Communications or Alarm System

The Permittee shall maintain access to the communications or alarm system, as required by 40 CFR 264.34 and Section F of the Part B Permit Application.

II.I.4. Arrangements with Local Authorities

The Permittee shall maintain arrangements with state and local authorities, as required by 40 CFR 264.37. If state or local officials refuse to enter into preparedness and prevention arrangements, the Permittee must document the refusal in the operating record.

II.J. CONTINGENCY PLAN

II.J.1. Implementation of Plan

The Permittee shall immediately carry out the provisions of the Contingency Plan - Section G of the Part B Permit Application, whenever there is a fire, explosion, or release of hazardous waste or constituents which could threaten human health or the environment.

II.J.2. Copies of Plan

Copies of the contingency plan and all revisions to the plans must be:

II.J.2.a. Maintained at the facility; and

II.J.2.b. Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services. [40 CFR 264.53]

II.J.3. Amendments to Plan

The Permittee shall review and immediately amend, if necessary, the Contingency Plan, as required by 40 CFR 264.54. Amendments to the Contingency Plan are subject to the permit modification provisions of 40 CFR 270.41 and 270.42.

II.J.4. Emergency Coordinator

A trained Emergency Coordinator shall be available at all times in case of an emergency, as required by 40 CFR 264.55. The Emergency Coordinator shall have the authority to commit the resources needed to carry out the contingency plan.

The names, addresses, and telephone numbers of all persons qualified to act as Emergency Coordinators shall be listed in the Contingency Plan. [40 CFR 264.52(d)]

II.J.5. Emergency Procedures

Whenever there is an imminent or actual emergency situation, the Permittee shall immediately comply with the requirements of 40 CFR 264.56.

II.K. RECORDKEEPING AND REPORTING

In addition to the recordkeeping and reporting requirements specified elsewhere in this Permit, the Permittee shall do the following:

II.K.1. Operating Record

The Permittee shall maintain a written operating record at the facility, in accordance with 40 CFR 264.73.

II.K.2. Availability, Retention, and Disposition of Records

The Permittee shall comply with the maintaining, retention, and disposition of all records in accordance with the requirements of 40 CFR 264.74.

II.K.3. Biennial Report

The Permittee shall comply with the biennial report requirements of 40 CFR 264.75 and 270.30(l)(9) and any other annual reporting requirement of the Secretary.

II.K.4. Manifests

Whenever a shipment of hazardous waste is initiated from the facility, the Permittee shall comply with the generator requirements in K.A.R. 28-31-4 and 40 CFR 264.71(c).

II.L. GENERAL CLOSURE REQUIREMENTS

II.L.1. Performance Standard

The Permittee shall close the facility, as required by 40 CFR 264.111, 264.112(a) and (b), 264.178, and 264.197 and in accordance with the Closure Plan - Section I of the Part B Permit Application.

II.L.2. Amendment to Closure Plan

The Permittee shall amend the Closure Plan, in accordance with 40 CFR 264.112(c), whenever necessary.

II.L.3. Notification of Closure

The Permittee shall notify the Secretary in writing at least forty-five (45) days prior to the date on which they expect to begin final closure of the facility, as required by 40 CFR 264.112(d).

II.L.4. Time Allowed for Closure

After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the unit or facility, all hazardous waste and shall complete closure activities, in

accordance with 40 CFR 264.113 and the schedules specified in the Closure Plan - Section I of the Part B Permit Application.

II.L.5. Disposal or Decontamination of Equipment, Structures, and Soils

The Permittee shall decontaminate and/or dispose of all contaminated equipment, structures, and soils, as required by 40 CFR 264.114 and the Closure Plan - Section I of the Part B Permit Application.

II.L.6. Certification of Closure

The Permittee shall certify that the facility has been closed in accordance with the specifications in the Closure Plan - Section I of the Part B Permit Application, as required by 40 CFR 264.115.

II.M. FINANCIAL REQUIREMENTS

II.M.1. Cost Estimate for Closure

II.M.1.a The Permittee's current cost estimate for closure, prepared in accordance with 40 CFR 264.142(a), is contained in Cost Estimates for Closure, Section I-4 of the Part B Permit Application. The cost estimate must be based on the plan implementation cost, in current dollars, assuming that a third party performs the work.

II.M.1.b. The Permittee shall adjust the closure cost estimate for inflation within sixty (60) days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with 40 CFR 264.143.

If using the financial test demonstration, the Permittee shall adjust the closure cost estimate for inflation within thirty (30) days after the close of the firm's fiscal year and before submission of updated information to the Secretary.

The adjustment shall be made by either recalculating the maximum cost of closure or by using an inflation factor derived from the most current quarterly Implicit Price Deflator for Gross Domestic Product published by the U.S. Department of Commerce in its Survey of Current Business. [40 CFR 264.142(b)]

II.M.1.c. The Permittee shall revise the closure cost estimate in the Part B permit application whenever there is a change in the facility's closure plan as required by 40 CFR 264.142(c) and Permit condition II.L. This type of revision is subject to the permit modification requirements of 40 CFR 270.41 and 270.42 and Permit Condition I.B.1.

II.M.1.d. The Permittee shall keep at the facility the latest adjusted closure cost estimate as required by 40 CFR 264.142(d) and Permit Condition I.J.4.

II.M.2. Liability Requirements

II.M.2.a. Sudden Accidental Occurrences

The Permittee shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility. The Permittee shall maintain liability coverage for sudden accidental occurrences in the amount of at least one million dollars (\$1,000,000) per occurrence with and annual aggregated of at least two million dollars (\$2,000,000), exclusive of legal defense costs. [40 CFR 264.147(a)]

II.M.2.b. Non-Sudden Accidental Occurrences

The Permittee shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by non-sudden accidental occurrences arising from operations of the facility. The Permittee shall maintain liability coverage for non-sudden accidental occurrences in the amount of at least three million dollars (\$3,000,000) per occurrence with and annual aggregated of at least six million dollars (\$6,000,000), exclusive of legal defense costs. [40 CFR 264.147(b)]

II.M.3. Financial Assurance for Facility Closure

The Permittee shall demonstrate continuous compliance by providing documentation of financial assurance, as required by 40 CFR 264.143 and 264.147, in at least the amount of the closure cost estimates required by Permit Condition II.M.1. and II.M.2. The Permittee shall maintain documentation demonstrating the Permittee's financial assurance in the Part B Permit Application, Attachment 11, in accordance with 40 CFR 264.143 and 264.147.

Changes in financial assurance mechanisms and coverage amount must be approved by the Secretary pursuant to 40 CFR 264.143 and 264.147.

II.M.4. Incapacity of Owners or Operators, Guarantors, or Financial Institutions

The Permittee shall comply with 40 CFR 264.148 whenever necessary.

SECTION III - STORAGE IN CONTAINERS

III.A. DESCRIPTION OF STORAGE FACILITIES

The Permittee is authorized to operate two hazardous waste container storage facilities, one for storage of pentachlorophenol wastes and one for storage of other solid hazardous wastes. Both container storage areas are located on concrete pads with containment curbing and sealed surfaces. The Permittee is authorized to handle a maximum volume of 5,500 gallons, the equivalent of 100 fifty-five (55) gallon containers, in the Pentachlorophenol Waste Facility and 45 cubic yards (maximum of 9,090 total gallons) in the Solid Hazardous Waste Facility. Subject to the requirements of Permit Condition III.B. the Permittee may store hazardous waste generated on-site in storage areas covered by this Permit.

The Permittee is authorized for storage of hazardous waste in containers, as defined in Section D-1 of the Part B Permit Application and Section III.C of this Permit. Approved hazardous waste storage containers will be maintained in the hazardous waste storage areas described in Section D of the Part B Permit Application. The Permittee is prohibited from storing hazardous waste in containers for more than ninety (90) days at any areas other than the two facilities described here and in the Part B permit application.

III.B. PERMITTED AND PROHIBITED WASTE IDENTIFICATION

III.B.1. The Permittee shall operate and maintain the container storage areas in accordance with 40 CFR 264, Subpart I and the specifications and design criteria submitted in Section D of the Part B Permit Application.

III.B.2. The Permittee is allowed to store the hazardous wastes identified in Attachment A of this Permit in the container storage areas described in Section III.A of the Permit and Section D of the Part B Permit Application, subject to the terms of this Permit. The Permittee is prohibited from storage of hazardous wastes that are not identified in Attachment A.

The Permittee may only store the hazardous waste(s) identified in Attachment I at the container storage facilities. Storage of any other hazardous waste(s) at the container storage facilities is prohibited.

III.C. OPERATION AND MAINTENANCE

The Permittee shall operate and maintain the container storage facilities in accordance with 40 CFR 264, Subpart I and the specifications and design criteria contained in the Part B permit application.

III.D. CONTAINER STORAGE FACILITY CAPACITIES

<u>Storage Area</u>	<u>Capacity</u>
Pentachlorophenol Facility	100 Fifty-five gallon containers (maximum of 5,500 total gallons)
Solid Hazardous Waste Facility	Forty-five cubic yards (maximum of 9,090 total gallons)

Metal storage racks must be maintained at the Pentachlorophenol storage facility. The storage racks must be used in a manner that ensures the integrity of the waste containers is maintained. No containers may be stacked in greater than two tiers. The gondola container(s) may not be stacked. Other sized containers may be used provided conditions of 40 CFR 264, Subpart I and all other provisions of this Permit are met.

III.E. CONDITION OF CONTAINERS

If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this Permit. [40 CFR 264.171]

III.F. COMPATIBILITY OF WASTE WITH CONTAINERS

The Permittee shall use a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored so that the ability of the container to contain the waste is not impaired. [40 CFR 264.172]

III.G. MANAGEMENT OF CONTAINERS

III.G.1. The Permittee shall keep all containers closed during storage, except when it is necessary to add or remove waste, and shall not open, handle, or store containers in a manner which may rupture the container or cause it to leak. [40 CFR 264.173]

III.G.2. The Permittee shall comply with all the applicable requirements of 40 CFR 264, Subpart CC in accordance with Section O of the Part B Permit Application and Part II of the Permit.

III.H. INSPECTION SCHEDULES AND PROCEDURES

The Permittee shall inspect the container storage area weekly, in accordance with the Inspection Schedule contained in Section F-2 of the Part B Permit Application, to detect leaking containers

and deterioration of containers and the containment systems caused by corrosion and other factors. [40 CFR 264.174]

III.I. CONTAINMENT SYSTEMS

The Permittee shall maintain the containment system in accordance with the plans and specifications contained in Secondary Containment System Design and Operation - Section D.1.a.3 of the Part B Permit Application. [40 CFR 264.175]

The Permittee shall remove any wastes resulting from the spills and leaks or accumulated precipitation from the secondary containment system as soon as possible. [40 CFR 264.175(d)]

III.J. SPECIAL CONTAINER PROVISIONS FOR IGNITABLE OR REACTIVE WASTE

III.J.1. The Permittee shall not locate containers holding ignitable or reactive waste within fifteen (15) meters (50 feet) of the facility's property line. [40 CFR 264.176]

III.J.2. The Permittee shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste and follow the procedures specified in Section F-5 of the Part B Permit Application. [40 CFR 264.17(a) and 264.176]

III.K. SPECIAL CONTAINER PROVISIONS FOR INCOMPATIBLE WASTE

III.K.1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in the same container unless 40 CFR 264.17(b) is complied with. [40 CFR 264.177(a)]

III.K.2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material. [40 CFR 264.177(b)]

III.K.3. The Permittee shall separate containers of incompatible wastes. The Permittee shall store incompatible wastes in separate bays. [40 CFR 264.177(c)]

III.L. RECORDKEEPING

The Permittee shall place the results of all waste analyses and trial tests and any other documentation showing compliance with the requirements of 40 CFR 264.17(c) and 264.177 in the facility operating record. [40 CFR 264.73]

III.M. CLOSURE

At closure of the container storage area, the Permittee shall remove all hazardous waste and hazardous waste residues from the containment systems, in accordance with the procedures in the Closure Plan - Section I of the Part B Permit Application. [40 CFR 264.178]

SECTION IV - CLOSURE OF TANKS

IV.A. DESCRIPTION OF TANK SYSTEM

The tank system is called "The North Area Solids Handling Facility" (NASHF). The NASHF tank system consists of a storage/settling tank, a mix tank, a filter press, a transfer pump, associated ancillary equipment and a containment system. The Permittee is prohibited from storing for more than 90 days and/or treating hazardous waste(s) at any tank system including the NASHF tank system described here and in the Part B Permit Application. The tank system was removed from service in 1997 but was not RCRA closed. The tank system is currently used as a process flow-through system. The Permittee shall complete closure of the tanks within 90 days of discontinued use of the tank system.

IV.B. CLOSURE AND POST-CLOSURE CARE

IV.B.1. At closure of the tank system, the Permittee shall complete closure in accordance with the requirements of 40 CFR 264.197(a) and Section I of the Part B Permit Application.

IV.B.2. If the Permittee demonstrates that not all contaminated soils can be practically removed or decontaminated, the Permittee shall close the tank system and perform post-closure care following 40 CFR 264.197(b) and (c).

SECTION V - UNDERGROUND INJECTION CONTROL WELLS

V.A. DESCRIPTION OF UNDERGROUND INJECTION CONTROL WELLS

There are five (5) Underground Injection Control (UIC) wells, numbered 3, 4, 7, 8 and 9. The UIC wells receive hazardous and non-hazardous process wastewaters. The UIC wells are also a part of the groundwater clean-up activities at the facility.

V.B. PERMIT BY RULE PROVISIONS FOR UIC WELLS

State and federal hazardous waste regulations (K.A.R. 28-31-8 and 40 CFR 270.60(b)) specify that UIC wells that are permitted under 40 CFR Parts 144 and 145 shall be deemed to have RCRA hazardous waste permits.

All five of the Permittee's UIC wells were issued permits under the authorities of 40 CFR 144 and 145. The five UIC wells and Permits are identified as follows:

<u>UIC Well Number</u>	<u>Permit Number</u>
#3	KS-01-173-004
#4	KS-01-173-005
#7	KS-01-173-006
#8	KS-01-173-007
#9	KS-01-173-008

As provided by 40 CFR 270.60(b), the five (5) UIC wells shall be deemed to have effective RCRA hazardous waste permits so long as the UIC wells are permitted under 40 CFR Parts 144 and 145 and the requirements of 40 CFR 270.60(b) are met.

SECTION VI - AIR EMISSION STANDARDS

V.A. AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS (SUBPART BB)

Equipment leaks are associated with units that manage hazardous waste with organic concentrations of at least 10 parts per million (ppm) by weight. Each piece of equipment subject to Subpart BB requirements shall be marked in such manner that it can be distinguished readily from other pieces of equipment. [40 CFR 264.1050(d)]

The facility shall identify wastes subject to this part in accordance with Section II.C of this permit [40 CFR 264.1063(d)]. Based on that determination the facility will follow the air emission standards for equipment leak protocol for light liquid and/or heavy liquid service.

In light liquid service means that the piece of the equipment contains or contacts a waste stream where the vapor pressure of one or more of the organic components in the stream is greater than 0.3 kilopascals (kPa) at 20 degree C, the total concentration of the pure organic components having a vapor pressure greater than 0.3 kilopascals (kPa) at 20 degree C is equal to or greater than 20 percent by weight, and the fluid is a liquid at operating conditions.

In heavy liquid service means that the piece of equipment is not in gas/vapor service or in light liquid service.

In gas/vapor service means that the piece of equipment contains or contacts a hazardous waste stream that is in the gaseous state at operating conditions.

VI.A.1. Standards for Pumps in Light Liquid Service [264.1052]

VI.A.1.a. The Permittee shall conduct monthly monitoring to detect leaks following the procedures in 40 CFR 264.1063(b).

VI.A.1.b. The Permittee shall conduct visual inspection for pump seal leakage at least on a weekly basis.

VI.A.1.c. A leak is detected if: (1) a leak detection instrument reads 10,000 ppm or greater, or (2) there are indications of liquid dripping from the pump seal.

VI.A.1.d. The Permittee shall repair leaks as soon as practicable. Repairs are to be made within 15 calendar days after detection. Time extensions for repairs must be in accordance with 40 CFR 264.1059.

VI.A.2. Standard for Pressure Relief Devices in Gas/Vapor Service [40 CFR 270.25(d), 264.1054]

VI.A.2.a. Except during pressure releases, no pressure relief device shall release detectable emissions, as indicated by an instrument reading of less than 500 ppm above background levels.

VI.A.2.b. Within 5 calendar days after a pressure release, no detectable emissions shall emanate from pressure release device.

VI.A.3. Standards for Open-ended Valves or Lines [40 CFR 264.1056]

Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve that seals the open end at all time except during operations, requiring hazardous waste stream flow through the open-ended valve or line.

VI.A.4. Standards for Valves in Gas/Vapor Service or Light Liquid Service [40 CFR 264.1057]

VI.A.4.a. The Permittee shall monitor based on detection of leaks in accordance with monitoring schedule in the approved Part B application. A reading of 10,000 ppm denotes a detected leak.

VI.A.4.b. The Permittee shall repair leaks as soon as practicable. Repairs are to be made within 15 calendar days after detection. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

VI.A.5. Standards for Pumps and Valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and Flanges and other Connectors. [40 CFR 270.25(d), 264.1058]

VI.A.5.a. Monitoring is required within 5 days by the method specified in 40 CFR 264.1063(b) if evidence of potential leak is found by sight, sound, smell, or other detection method.

VI.A.5.b. A leak is detected if a leak detection instrument reads 10,000 ppm or greater.

VI.A.5.c. The Permittee shall repair leaks as soon as practicable. Repairs are to be made within 15 calendar days after detection. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

VI.A.5.d. Time extensions for repairs must be in accordance with 40 CFR 264.1059.

VI.A.6. Testing

The Permittee shall perform the compliance testing according to the requirements of 40 CFR 264.1063.

VI.A.7. Record Keeping Requirements [40 CFR 264.1064]

VI.A.7.a. The Permittee shall record the following information in the facility's operating record:

- i. Equipment identification number and hazardous waste management unit identification,
- ii. Approximate locations within the facility,
- iii. Type of equipment (e.g., pump or pipeline valve),
- iv. Percent by weight total organics in the hazardous waste stream at the equipment,
- v. Hazardous waste state at the equipment (e.g., liquid), and
- vi. Method of compliance with the standard.

VI.A.7.b. Record of Leaks: The Permittee shall record the following information in an inspection log which shall be kept in the facility operating record when each leak is detected:

- i. The instrument and operator identification numbers and the equipment identification number,
- ii. The date evidence of a potential leak was found,
- iii. The date the leak was detected and the dates of each attempt to repair the leak,
- iv. Repair methods applied in each attempt to repair the leak,
- v. If maximum instrument reading measured by the methods specified in 40 CFR 264.1063(b) after each repair attempt is equal to or greater than 10,000 ppm,

- vi. "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak,
- vii. Documentation supporting the delay of repair of a valve in compliance with 40 CFR 264.1059(c),
- viii. The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a hazardous waste management unit shutdown,
- ix. The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days, and
- x. The date of successful repair of the leak.

VI.A.8. Reporting Requirements

The Permittee shall fulfill the reporting requirements according to 264.1065.

- VI.A.9. Within 90 days of the effective date of this permit, the facility must submit to the Secretary the name of the instrument that will be used to perform monthly leak detection inspection, its calibration and maintenance information and any other instruments needed to fulfill the requirements of permit conditions VI.A.1 through VI.A.8. In addition, the facility must update Appendix E adding the monthly checklist for all 90 Subpart BB locations as shown in Appendix E-9. The facility shall submit a Class 1 permit modification to include checklists for monthly monitoring of each instrument.

VI.B. AIR EMISSION STANDARDS FOR TANKS AND CONTAINERS (SUBPART CC)

The Permittee shall comply with all applicable requirements of 40 CFR 264. Subpart CC, Permit condition III.B of Part II of the Permit, and Appendix E of the approved Part B of the Permit Application.

ATTACHMENT A

Only hazardous waste identified in Attachment A may be stored in containers at the respective container storage locations as described in the Part B application and this Permit. Storage of any other hazardous waste(s) not listed is prohibited.

<u>Characteristic Wastes</u>	<u>Toxicity Characteristic</u>	<u>F-Listed Codes</u>	<u>K-Listed Codes</u>	<u>U-Listed Codes</u>
D001	D004	F001	K016	U043
D002	D005	F002		U044
	D006	F003		U045
	D007	F005		U076
	D008	F021		U077
	D009	F024		U078
	D010	F025		U079
	D013	F027		U080
	D018	F039		U127
	D019			U128
	D021			U129
	D022			U131
	D028			U159
	D029			U208
	D032			U209
	D033			U210
	D034			U211
	D035			U226
	D037			U227
	D039			U228
	D040			
	D041			
	D042			
	D043			

U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION VII

Hazardous and Solid Waste Amendments Permit Part II

Pursuant to §227 of the Hazardous and Solid Waste Amendments of 1984 (HSWA), the United States Environmental Protection Agency (EPA) is granted authority to issue or deny permits or those portions of permits affected by the requirements established by HSWA. By this authority and pursuant to §§ 3001(g), 3001(h), 3002(b), 3004(d)-(g), 3004(m), 3004(n), 3004(u), 3004(v), and 3005 of the Resource Conservation and Recovery Act (RCRA) as amended by HSWA, 42 United States Code §§6921(g), 6921(h), 6922(b), 6924(d)-(g), 6924(m), 6924(n), 6924(u), 6924(v), and 6925, EPA hereby grants to Occidental Chemicals Company, LLC, a wholly owned subsidiary of Occidental Chemical Corporation, as Owner and Operator (Permittee), EPA ID# KSD007482029 permission to perform activities required by HSWA at their facility located at 6200 South Ridge Road, Wichita, Kansas 67215, latitude 37°35'000", longitude 97°25'015", in accordance with the conditions of Part II of this permit.

Part II of this permit addresses the corrective action requirements for solid waste management units and other HSWA requirements as administered and enforced by EPA. Applicable regulations are found in 40 Code of Federal Regulations (CFR) Parts 260 through 264, 268, 270, and 124, as specified in Part II of this permit.

All regulations cited in Part II of this permit refer to regulations in effect on the date of this permit issuance. With the exception of regulations in existence at the time of permit issuance and referenced in Part II of this permit, the only other RCRA regulations applicable to this facility during the life of Part II of this permit will be self-implementing regulations.

The Regional Administrator of EPA Region 7 has delegated authority to perform all actions necessary to issue, deny, modify, or revoke and reissue permits for owners and operators of hazardous waste treatment, storage, and disposal facilities pursuant to Section 3005 of RCRA to the Director of Region VII, Air, RCRA, and Toxics Division (Director) or the Director's designated representative, by delegation No. R7-8-6, dated January 1, 1995.

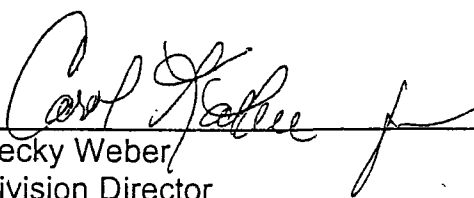
Part II of this permit is based on the premise that information in the permit application, submitted by the Permittee on November 11, 2004, (application) is accurate and that the facility will be operated as specified in the application.

Any inaccuracies found in the application or other submitted information may be grounds for termination, revocation and reissuance, or modification of Part II of this permit in accordance with 40 CFR §§270.41, 270.42, and 270.43, and/or for enforcement action. The Permittee must inform EPA of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with Part II of this permit.

Part II of this permit shall become effective at 12:01 a.m. on August 30, 2007 and shall remain in effect until August 30, 2017 unless revoked and reissued, terminated, or continued in accordance with 40 CFR §§270.41, 270.43, 270.51. Part II of this permit shall remain in effect even if the Hazardous Waste Management Permit (Part I) is terminated or expired.

Done at Kansas City, Kansas, this 25th day of July, 2007.





Becky Weber
Division Director
Air, RCRA, and Toxics Division
U.S. Environmental Protection Agency, Region VII

**HAZARDOUS AND SOLID WASTE AMMENDMENTS PERMIT
OCCIDENTAL CHEMICALS CORPORATION, INC.
WICHITA, KANSAS
EPA I.D. #KSD 007482029**

TABLE OF CONTENTS

PART II

<u>Section</u>	<u>Page</u>
A. DEFINITIONS.....	1
A.1. Area of Concern (AOC).....	1
A.2. Corrective Measures Study (CMS) Guidance.....	1
A.3. Director.....	1
A.4. Facility	1
A.5. Hazardous Constituent.....	1
A.6. Hazardous Waste	2
A.7. Interim Measure	2
A.8. Quality Assurance Project Plan (QAPP)	2
A.9. RCRA Corrective Action Plan.....	2
A.10. RCRA Facility Investigation (RFI) Guidance	2
A.11. Release	2
A.12. Solid Waste Management Unit (SWMU)	3
A.13. Stabilization	3
B. STANDARD CONDITIONS	4
B.1. Effect of a Permit.....	4
B.2. Submittal of Permit Requirements.....	4
B.3. Permit Modification, Revocation and Reissuance, and Termination	5
B.4. Permit Renewal.....	6
B.5. Duty to Reapply	6
B.6. Permit Expiration.....	6
B.7. Transfer of Permits	8
B.8. Severability	8
B.9. Appeal of a Permit	8
B.10. Duty to Comply.....	9
B.11. Need to Halt or Reduce Activity Not a Defense.....	9
B.12. Duty to Mitigate.....	9
B.13. Proper Operation and Maintenance	10
B.14. Duty to Provide Information.....	10
B.15. Inspection and Entry	10

<u>Section</u>	<u>Page</u>
B.16. Signatory Requirement	11
B.17. Monitoring and Records	11
B.18. Reporting Planned Changes.....	12
B.19. Reporting Noncompliance	12
B.20. Other Noncompliance	13
B.21. Other Information	13
B.22. Incorporations to the Permit	14
B.23. Confidential Information	14
B.24. Supplemental Data	14
B.25. Other Requirements	14
C. CORRECTIVE ACTION	16
C.1. Authority	16
C.2. Identification of SWMUs and AOCs.....	16
C.3. Notification Requirements for and Assessment of Newly-Identified SWMUs and AOCs.....	17
C.4. Notification Requirements for Newly-Identified Releases at SWMUs/AOCs.....	19
C.5. Stabilization and Interim Measures	21
C.6. RFI Work Plan	23
C.7. RFI Reports.....	24
C.8. Corrective Measures Study (CMS) Work Plan.....	25
C.9. Corrective Measures Study Report (CMS Report).....	28
C.10. Corrective Measures Selection	29
C.11. Corrective Measures Implementation.....	29
C.12. Financial Assurance for Corrective Action	29
C.13. Quarterly Progress Reports.....	35
C.14. Review and Approval Procedures.....	36
C.15. Dispute Resolution.....	36
D. FACILITY-SPECIFIC CONDITIONS	38
D.1. Waste Minimization.....	38
D.2. Land Disposal Restrictions	39
D.3. Reserved.....	39
D.4. Air Emission Standards for Tanks, Containers, and Surface Impoundments (Subpart CC).....	39
D.5. Management of HSWA Regulated Waste	41
E. FACILITY SUBMISSION SUMMARY	42
E. SWMU/AOC SUMMARY	45

A. DEFINITIONS

For purposes of Part II of this permit, terms used herein shall have the same meaning as those in Resource Conservation and Recovery Act (RCRA) and 40 Code of Federal Regulations (CFR) Parts 124, 260, 261, 264, 266, 268, and 270, unless this permit specifically provides otherwise. Where terms are not defined in RCRA, the regulations, the permit, or U.S. Environmental Protection Agency (EPA) guidance or publications, the meaning associated with such terms shall be defined by standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

A.1. Area of Concern (AOC)

For purposes of this permit means any area of the Facility under the control or ownership of the owner or operator where a release to the environment of hazardous waste(s) or hazardous constituents has occurred, is suspected to have occurred, or may occur, regardless of the frequency or duration of the release.

A.2. Corrective Measures Study (CMS) Guidance

For purposes of this permit can be found in the RCRA Corrective Action Plan (Final), dated May 1994 and given the OSWER Directive Number 9902.3-2A.

A.3. Director

For purposes of this permit means the Division Director of the Air, RCRA, and Toxics Division of EPA Region 7.

A.4. Facility

For purposes of this permit means all contiguous property under the control of the owner or operator.

A.5. Hazardous Constituent

For purposes of this permit means any constituent identified in Appendix VIII of 40 CFR Part 261 or any constituent identified in Appendix IX of 40 CFR Part 264.

A.6. Hazardous Waste

For purposes of this permit means any solid waste, as defined in 40 CFR §261.2, which also meets any of the criteria of a hazardous waste as listed in 40 CFR §261.3.

A.7. Interim Measure

For purposes of this permit means those actions taken to immediately control or abate threats or potential threats to human health or the environment from releases or potential releases of hazardous waste or hazardous constituents, which can be initiated before implementation of the final corrective measures for a Facility.

A.8. Quality Assurance Project Plan (QAPP)

For purposes of this permit means a plan of the same name prepared according to EPA's document titled "EPA Requirements for Quality Assurance Project Plans (EPA QA/R-5)" and any subsequent revisions or editions.

A.9. RCRA Corrective Action Plan

For purposes of this permit means a document of the same name dated May 1994 and given the Office of Solid Waste and Emergency Response (OSWER) Directive Number 9902.3-2A and EPA Document Number 520-R-94-004 and any subsequent revisions or editions.

A.10. RCRA Facility Investigation (RFI) Guidance

For purposes of this permit means the document of the same name dated May 1989 and given the OSWER Directive Number 9502.00-6D and the EPA Document Number 530/SW-89-031.

A.11. Release

For purposes of this permit means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes (including hazardous constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents).

A.12. Solid Waste Management Unit (SWMU)

For purposes of this permit means any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

A.13. Stabilization

For purposes of this permit means actions to control or abate threats to human health and/or the environment from releases at RCRA facilities, and /or to prevent or minimize the further spread of contamination while long-term remedies are pursued.

B. STANDARD CONDITIONS

B.1. Effect of a Permit

The Permittee is allowed to manage the hazardous wastes subject to the requirements of Part II of this permit in the units authorized by and operated in accordance with Part I of the permit. Part II of this permit consists of the conditions contained herein, including those in any attachments thereto; the application; and the applicable regulations contained in 40 CFR Parts 124, 260 through 264, 268, and 270. Applicable regulations are those which are in effect on the date of issuance of this Permit. Subject to 40 CFR §270.4, compliance with this Permit generally constitutes compliance, for the purposes of enforcement, with Subtitle C of the Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA). However, certain regulations which become effective after the date that Part II of this permit is issued may be applicable to the Permittee if their promulgation waives this "permit as a shield provision." The Permittee remains subject to any regulations governing activities not covered by this permit, for example, those regulations to which hazardous waste generators are subject. Issuance of this Permit does not convey any property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local laws or regulations. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA, 42 U.S.C. §§6928(a), 6928(h), 6934, and 6973.

B.2. Submittal of Permit Requirements

- a. Failure to submit the information required in Part II of this permit, or falsification of any submitted information, is subject to enforcement and/or termination of Part II of this permit.
- b. The Permittee shall ensure that all plans, reports, notifications, and other submissions to the Director required in Part II of this permit are signed and certified in accordance with 40 CFR §§270.11 and 270.30(k).
- c. All work plans and reports shall be submitted in accordance with the approved schedule. Extensions of the due dates specified in Part II of this permit may be granted by the Director.

- d. Electronic files of work plans and reports should be submitted to EPA within 14 days upon request.
- e. Unless otherwise specified or additional copies are requested by EPA, two (2) copies of these plans, reports, notifications or other submissions shall be submitted to the EPA and sent by certified mail or hand delivered:

U.S. Environmental Protection Agency Region 7
Attn: Chief, RCRA Corrective Action and Permits Branch
Air, RCRA, and Toxics Division
901 N. 5th Street
Kansas City, Kansas 66101

In addition, one (1) copy of these plans, reports, notifications or other submissions shall be submitted to:

Chief of the Hazardous Waste Permits Section
Kansas Department of Health and Environment
Bureau of Waste Management
1000 SW Jackson, Suite 320
Topeka, Kansas 66612-1366

B.3. Permit Modification, Revocation and Reissuance, and Termination

- a. Part II of this permit may be modified, revoked and reissued, or terminated for cause, as specified in 40 CFR §§270.41, 270.42, and 270.43. If this permit is modified, only the conditions subject to the modification will be reopened. If this permit is revoked and reissued, the entire permit is reopened and subject to revision, and may be reissued for a new term.
- b. If the Director determines that further actions beyond those required in Part II of this permit, or changes to the requirements set forth herein, are warranted, the Director may modify Part II of this permit in accordance with 40 CFR §270.41. The modification will become an enforceable part of this permit.
- c. Pursuant to the provisions of 40 CFR §270.42, the Permittee may request a modification of Part II of this permit at any time.

- d. Modifications to Part II of this permit do not constitute a reissuance of the permit. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any condition in Part II of this permit.

B.4. Permit Renewal

- a. Part II of this permit may be renewed as specified in 40 CFR §270.30(b). Review of any application for a permit renewal shall consider improvements on the state of control and measurement technology, as well as changes in applicable regulations. [40 CFR §270.30(b), HSWA §212]
- b. Unless the Director has determined that corrective action has been completed, the Permittee shall submit a complete application for a new permit prior to the expiration of Part II of this permit. Such application must be submitted at least one hundred eighty (180) calendar days prior to permit expiration unless permission for a later submission date has been granted by the Director. [40 CFR §270.10(h) and 270.30(b)]

B.5. Duty to Reapply

Pursuant to 40 CFR §270.30(b), if the Permittee wishes to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittee must apply for and obtain a new Permit.

The Permittee shall apply for a new permit if any activity required by this Permit is not completed upon its expiration.

B.6. Permit Expiration

B.6.1. Permit Duration

Pursuant to 40 CFR §270.50, Part II of this Permit shall be effective for a fixed term not to exceed ten (10) years. Except as provided in Permit Condition B.6.2. below, the term of a permit shall not be extended by modification beyond the maximum term of ten (10) years. The Director may issue a permit for a duration of less than ten (10) years or may grant a permit modification to allow earlier permit termination.

B.6.2. Continuation of Expiring Permits

Part II of this Permit, and all conditions herein, will remain in effect and continue in force under 5 U.S.C. §558(c) until the effective date of a new permit (see 40 CFR §124.15) if:

- a. The Permittee has submitted a timely, complete application under 40 CFR §270.14 and the applicable sections in §§270.15 through 270.29 which is a complete (under §270.10(c)) application for a new permit; and
- b. The Director through no fault of the Permittee, does not issue a new permit with an effective date under 40 CFR §124.15 on or before the expiration date of the previous permit.
- c. Permits continued under this permit condition remain fully effective and enforceable.

B.6.3. Enforcement

If the Permittee is not in compliance with the conditions of the expiring or expired permit, the Director may choose to do any or all of the following:

- a. Initiate enforcement action based upon the permit which has been continued;
- b. Issue a notice of intent to deny the new permit under 40 CFR §124.6. If the new permit is denied, the Permittee shall cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
- c. Issue a new permit under 40 CFR Part 124 with appropriate conditions; or
- d. Take other actions authorized by RCRA regulations.

B.6.4. State Continuation

In the event that the Kansas Department of Health and Environment (KDHE) receives hazardous waste program authorization under 40 CFR Part 271 after the effective date of this Permit and if the Permittee submits a timely and complete application under applicable Kansas law and regulations, the terms and conditions of this Permit continue in force beyond the expiration date of this Permit, but only until the effective date of the State of Kansas' issuance or denial of a State RCRA permit.

B.7. Transfer of Permits

Part II of this permit is not transferable to any person or entity until such a time as this permit has been modified or revoked and reissued to identify the proposed new owner or operator of the facility (New Permittee) and to incorporate such other requirements as may be necessary, all in accordance with the procedures set forth in 40 CFR §270, Subpart D. This permit provision applies to transfers of the Facility or any portion thereof to a new owner or operator. At least ninety (90) calendar days prior to the anticipated date of transfer, the New Permittee shall submit to the Director: 1) a revised permit application; and 2) a copy of the written agreement between the Permittee and the New Permittee, containing the specific date for transfer of the permit responsibilities described herein. The Permittee and the New Permittee shall also comply with the financial requirements as more specifically set forth in 40 CFR §270.40 and 40 CFR, §264, Subpart H. It shall be the Permittee's responsibility to notify the New Permittee in writing of the requirements of 40 CFR Parts 264 and 270 and Part II of this permit. [40 CFR §270.30(1)(3) and 264.12(c)]

B.8. Severability

The provisions of Part II of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

B.9. Appeal of a Permit

Part II of this permit may be appealed pursuant to the provisions of 40 CFR §124.19(a), which provides as follows:

Within thirty (30) calendar days after a RCRA final permit decision has been issued under 40 CFR §124.15, any person who filed comments on that draft permit or participated in the public hearing may petition the Environmental Appeals Board, in writing, to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may petition for administrative review only to the extent of the changes from the draft to the final permit decision. The thirty (30)-day period within which a person may request review under this section begins with the service of notice of the Regional Administrator's action unless a later date is specified in that notice. The petition shall include a statement of the reasons supporting that review, including a demonstration that any issues being raised were raised during the public comment period (including any public hearing) to the extent required by these regulations and when appropriate, a showing that the condition in question is based on:

- (1) A finding of fact or conclusion of law which is clearly erroneous, or
- (2) An exercise of discretion or an important policy consideration which the Environmental Appeals Board should, in its discretion, review.

B.10. Duty to Comply

The Permittee shall comply with all conditions in Part II of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any noncompliance with Part II of this permit, other than noncompliance authorized by an emergency permit, constitutes a violation of Part II of this permit and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [40 CFR §270.30(a)]

B.11. Need to Halt or Reduce Activity Not a Defense

In any enforcement action, it shall not be a defense for the Permittee to establish that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of Part II of this permit. [40 CFR §270.30(c)]

B.12. Duty to Mitigate

In the event of noncompliance with Part II of this permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out

such measures as are reasonable to prevent significant adverse impacts on human health or the environment. [40 CFR §270.30(d)]

B.13. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of Part II of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of Part II of this permit. [40 CFR §270.30(e)]

B.14. Duty to Provide Information

The Permittee shall furnish to the Director, within a time specified by the Director, any relevant information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating Part II of this permit, or to determine compliance with Part II of this permit. The Permittee shall also furnish to the Director, upon request, copies of records required to be kept by Part II of this permit. [40 CFR §264.74(a) and 270.30(h)]

B.15. Inspection and Entry

Pursuant to 40 CFR §270.30(i), the Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of Part II of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of Part II of this permit;
- c. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under Part II of this permit; and

- d. Sample or monitor, at reasonable times, for the purpose of assuring compliance with Part II of this permit or as otherwise authorized by RCRA, any substances or parameters at any location.

B.16. Signatory Requirement

All applications, reports, or information submitted to or requested by the Director, his/her designee, or authorized representative, shall be signed and certified in accordance with 40 CFR §270.11. [40 CFR 270.30(k)]

B.17. Monitoring and Records

- a. Samples and measurements taken, to comply with Part II of this permit, for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261 or an equivalent method approved by the Director. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, Standard Methods of Wastewater Analysis, or an equivalent method approved under 40 CFR §260.21. Furthermore, the Permittee shall follow a written Quality Assurance Project Plan (QAPP) for collection and analysis of environmental samples and measurements that has been approved by the EPA Region 7's Quality Assurance personnel.
- b. The Permittee shall retain records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by Part II of this permit, the certification required by 40 CFR §264.73(b)(9), and records of all data used to complete the application for Part II of this permit for a period of at least three (3) years from the date of the sample, measurement, report, record, certification, or application. This period may be extended by request of the Director at any time and is automatically extended during the course of any unresolved enforcement action regarding this facility. [40 CFR §264.74(b) and 270.30(j)(2)]
- c. Pursuant to 40 CFR §270.30(j)(3), records of monitoring information shall specify:
 - (1) The dates, exact place, and times of sampling or measurements;

- (2) The individuals who performed the sampling or measurements;
- (3) The dates analyses were performed;
- (4) The individuals who performed the analyses;
- (5) The analytical techniques or methods used; and
- (6) The results of such analyses.

B.18. Reporting Planned Changes

The Permittee shall give a twenty (20) calendar day advanced notice to the Director of any physical alterations or additions to the portions of the facility subject to Part II of this permit, except for those alterations or additions for which notice is required by Part I of this permit. [40 CFR §270.30(L)(1)]

B.19. Reporting Noncompliance

- a. The Permittee shall give a twenty (20) calendar day advanced notice to the Director of any planned changes in the permitted facility or activities required by Part II of this permit which may result in noncompliance with the requirements of Part II of this permit. [40 CFR §270.30(L)(2)]
- b. The Permittee shall report to the Director any noncompliance with Part II of this permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. The report shall include the following:
 - (1) Information concerning release of any hazardous waste and/or hazardous constituent that may cause an endangerment to public drinking water supplies; and
 - (2) Any information of a release or discharge of hazardous waste and/or a hazardous constituent, or of a fire or explosion from the hazardous waste management facility, which could threaten the environment or human health outside the facility.

- c. The description of the occurrence and its cause shall include:
- (1) Name, address, and telephone number of the owner or operator;
 - (2) Name, address, and telephone number of the facility;
 - (3) Date, time, and type of incident;
 - (4) Name and quantity of materials involved;
 - (5) The extent of injuries, if any;
 - (6) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
 - (7) Estimated quantity and disposition of recovered material that resulted from the incident.
- d. A written notice shall also be provided within five (5) calendar days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and, if not, the time the Permittee anticipates that noncompliance will continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Director may waive the 5-day written notice requirement in favor of a written report within fifteen (15) calendar days. [40 CFR §270.30(1)(6)]

B.20. Other Noncompliance

The Permittee shall report all instances of noncompliance with EPA statutes, regulations, or this permit not otherwise required to be reported in above Permit Condition B.19 at the time monitoring reports are submitted. The reports shall contain the information listed in Permit Condition B.19.b., c., and d. of this section. [40 CFR §270.30(1)(10)]

B.21. Other Information

Whenever the Permittee becomes aware of the failure to submit any facts in the permit application relevant to Part II of this permit or the submittal of incorrect

information in the permit application, or in any report to the Director, the Permittee shall promptly submit such facts or information. [40 CFR §270.30(1)(11)]

B.22. Incorporations to the Permit

All plans and schedules required by the conditions of Part II of this permit are, upon approval of the Director, enforceable under Part II of this permit. Any noncompliance with such approved plans and schedules shall constitute noncompliance with Part II of this permit.

Any portion of the permit application referenced by Part II of this permit is enforceable under Part II of this permit. Any noncompliance with such portions of the permit application shall constitute noncompliance with Part II of this permit.

Any changes necessary to items incorporated into the permit or enforceable under Part II of this permit shall be made in accordance with the permit modification procedures in Permit Condition B.3.

B.23. Confidential Information

In accordance with 40 CFR §270.12, the Permittee may claim confidential any information required to be submitted by this permit. This claim must be asserted at the time of submission.

B.24. Supplemental Data

All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken pursuant to Part II of this permit shall be maintained at the permitted facility during the term of Part II of this permit, including the term of any reissued permits. Such information shall be made available to the Director upon request.

B.25. Other Requirements

- a. The Permittee shall defend, indemnify, and hold harmless the EPA, its officers, agents and employees, officially or personally, against all actions, claims, and demands whatsoever which may arise from or on account of

the issuance of this permit or the construction or maintenance of any facilities hereunder.

- b. Within thirty (30) calendar days after receipt of the final permit, the Permittee shall submit a certification that the applicant has read the permit in its entirety and understands all the permit conditions contained herein.

C. CORRECTIVE ACTION

C.1. Authority

Section 3004(u) of RCRA, 42 U.S. Code (USC) §6924, and 40 CFR §264.101, require that all permits issued after November 8, 1984, address corrective action for releases of hazardous waste or hazardous constituents from any solid waste management unit (SWMU) at a treatment, storage, or disposal facility seeking the permit, regardless of when waste was placed in the unit or whether the unit is closed. Those sections further require that permits issued under Section 3005 of RCRA, 42 USC §6925 contain a schedule of compliance for corrective action (where corrective action cannot be completed prior to permit issuance) and that such permits contain evidence of financial assurance for completing corrective action. Section 3004(v) of RCRA, 42 USC §6924(v) authorizes the Regional Administrator to require that corrective action be taken by the facility owner or operator beyond the facility boundary when necessary to protect human health and the environment, unless the owner or operator demonstrates that permission to undertake such action, despite the owner/operator's best efforts, was denied. Section 3005(c)(3) of RCRA, 42 USC §6925(c)(3) requires that each permit issued under that section shall contain terms and conditions as the Regional Administrator determines necessary to protect human health and the environment. The Regional Administrator has delegated authority to perform all actions necessary to enforce Part II of this permit to the Director of Region VII Air, RCRA, and Toxics Division (hereafter referred to as "Director") or the Director's designated representative.

C.2. Identification of SWMUs and AOCs

- a. Facility assessments and investigations have identified numerous active or closed SWMUs. Additionally, many AOCs have been established to designate historic and current production areas. Table F-1 and Figure F-1 in Permit Condition F of Part II of this permit identify the SWMUs, AOCs and their locations. The facility will update both Table F-1 and Figure F-1 whenever new SWMUs and AOCs are discovered. Pursuant to §3005(c)(3) of RCRA, 42 USC §6925(c)(3), EPA can require additional investigation and remediation if the Administrator determines it is necessary to protect human health and the environment.

- b. As specified below, Part II of this permit requires the Permittee to conduct further investigations and take corrective action as deemed appropriate by the Director for the releases or potential releases at the facility.
- C.3. Notification Requirements for and Assessment of Newly-Identified SWMUs and AOCs.
- a. The Permittee shall notify the Director in writing of any and all SWMUs/AOCs identified subsequent to the issuance of Part II of this permit no later than fifteen (15) calendar days after discovery. The Permittee shall submit a Class I Permit Modification to update the Table F-1 & Figure F-1 within 90 days of submitting notification of new SWMUs or AOCs.
 - b. The Director may require a work plan for conducting an investigation of the newly-identified SWMUs/AOCs. The Work Plan shall describe all the activities to be completed in order to characterize the newly-identified SWMUs/AOCs so that the Director can determine if a RCRA Facility Investigation is necessary. The Work Plan for the investigation shall be consistent with the requirements of the Release Assessment Scope of Work in the RCRA Corrective Action Plan. The Work Plan shall also be consistent with the RCRA Facility Investigation Guidance. Within thirty (30) calendar days after receipt of notice that the Director requires a work plan, the Permittee shall submit a SWMU/AOC Assessment Work Plan which shall include any of the following as specified in the Director's notice:
 - (1) discussion of past waste management practices at the unit or area;
 - (2) a sampling and analysis program for groundwater, land surface and subsurface strata, surface water or air, as necessary to determine whether a release of hazardous waste and/or hazardous constituents from such unit(s) or area has occurred, or is occurring;
 - (3) whether any release is harmful to human health or the environment; and/or
 - (4) a proposed schedule for implementation and completion of the work plan.

The sampling and analysis program, if required, shall be capable of yielding representative samples and must include parameters sufficient to identify migration of hazardous waste and/or hazardous constituents from the newly-identified SWMUs/AOCs to the environment. The SWMU/AOC Assessment Work Plan shall specify any data to be collected to provide for a complete SWMU/AOC Assessment Report, as defined below.

- c. The SWMU/AOC Assessment Work Plan will be reviewed in accordance with the procedures set forth in Part II Permit Condition C.14. Upon EPA's approval of the SWMU/AOC Assessment Work Plan, the Permittee shall implement said work plan in accordance with the schedules contained therein.
- d. The Permittee shall submit three (3) copies of the SWMU/AOC Assessment Report to the Director according to the schedule specified in the approved SWMU/AOC Assessment Work Plan. The SWMU Assessment Report shall present and discuss the information obtained from implementation of the approved SWMU/AOC Assessment Work Plan. At a minimum, the Report shall provide the following information for each newly-identified SWMU/AOC:
 - (1) The location of the newly-identified SWMU/AOC should be added to the SWMU/AOC figures/maps and their location in relation to other SWMUs/AOCs;
 - (2) The type and function of the unit or area;
 - (3) The general dimensions, capacities, and structural description of the unit or area;
 - (4) The period during which the unit or area was operated;
 - (5) The physical and chemical properties of all wastes that have been or are being managed at the SWMU/AOC, to the extent available;
 - (6) The results of any sampling and analysis conducted;
 - (7) Past and present operating practices;

- (8) Previous uses of the area(s) occupied by the SWMU/AOC;
 - (9) Amounts of waste handled; and
 - (10) Drainage areas and/or drainage patterns near the SWMU/AOC.
- e. The SWMU/AOC Assessment Report will be reviewed in accordance with the procedures set forth in Permit Condition C.14. Based on the findings of the Report, and any other available information, the Director will determine the need for further investigation, stabilization, a RCRA Facility Investigation, or a Corrective Measures Study.

C.4. Notification Requirements for Newly-Identified Releases at SWMUs/AOCs

- a. The Permittee shall notify the Director, in writing, of any release(s) of hazardous waste and/or hazardous constituents identified during the course of groundwater monitoring, field investigation(s), environmental auditing, or other activities undertaken after issuance of Part II of this permit, no later than fifteen (15) calendar days after discovery.
- b. The Director may require a work plan for conducting an investigation of the newly-identified release(s). The Work Plan shall describe all the activities to be completed in order to characterize the newly-identified release so that the Director can determine if a RCRA Facility Investigation (RFI) is necessary. The Work Plan for the investigation shall be consistent with the requirements of the Release Assessment Scope of Work in the RCRA Corrective Action Plan. Within thirty (30) calendar days after receipt of notice that the Director requires a work plan, the Permittee shall submit a Newly-Identified Release Investigation Work Plan which may include any of the following as specified in the Director's notice:
 - (1) Discussion of past waste management practices at the release;
 - (2) A sampling and analysis program for groundwater, land surface and subsurface strata, surface water or air, as necessary to determine whether it is harmful to human health or the environment; and/or

- (3) A proposed schedule for implementation and completion of the work plan.

The sampling and analysis program, if required, shall be capable of yielding representative samples and must include parameters sufficient to identify migration of the release to the environment. The Newly-Identified Release Investigation Work Plan shall specify any data to be collected to provide for a complete Newly-Identified Release Report, as defined below.

- c. The Newly-Identified Release Investigation Work Plan will be reviewed in accordance with the procedures set forth in Permit Condition C.14. Upon EPA's approval, the Permittee shall implement said plan in accordance with the schedule(s) contained therein.
- d. The Permittee shall submit two (2) copies of the Newly-Identified Release Report to the Director according to the schedule specified in the approved Newly-Identified Release Investigation Work Plan. The Newly-Identified Release Report shall present and discuss the information obtained from implementation of the approved Newly-Identified Release Investigation Work Plan so that the Director can determine if an RFI Work Plan is necessary. The report shall be consistent with the requirements of the Release Assessment Scope of Work in the RCRA Corrective Action Plan. At a minimum, the Report shall provide the following information for each newly-identified release:
- (1) The location of the newly-identified release in relation to SWMUs/AOCs;
 - (2) The general dimensions of the extent of the release;
 - (3) The period during which the release was suspected to have occurred;
 - (4) The physical and chemical properties of all wastes that have been determined to comprise the release;
 - (5) The results of any sampling and analysis conducted;
 - (6) A review of sampling and analysis conducted;

- (7) A comparison of the sampling and analysis data to the Data Quality Objectives;
 - (8) Past and present operating practices near and at the location of the release;
 - (9) Previous uses of the area(s) occupied near and at the location of the release;
 - (10) Amounts of waste handled near and at the release; and
 - (11) Drainage areas and/or drainage patterns near and at the release.
- e. The Newly-Identified Release Report will be reviewed in accordance with the procedures set forth in Permit Condition C.14. Based on the findings of the Report and any other available information, the Director will determine the need for further investigation, including stabilization, a RCRA Facility Investigation, or a Corrective Measures Study.

C.5. Stabilization and Interim Measures

- a. The Permittee shall evaluate available data and assess the need for interim measures, in addition to those specifically required by Part II of this Permit. Interim measures shall be used whenever necessary to achieve the goals of stabilization, which are to control or abate immediate threats to human health and the environment, and to prevent or minimize the spread of contaminants while long-term corrective remedies are being evaluated.
- b. The Permittee shall notify the Director within twenty-four (24) hours of becoming aware of a situation that requires stabilization or interim measures to protect human health or the environment.
- c. If, during the course of any activity initiated under Part II of this permit, the Director determines that a release or potential release of hazardous waste and/or hazardous constituents poses a threat to human health or the environment, the Director may require stabilization to control or abate such threat, or to minimize or prevent the further spread of contamination until final corrective measures can be initiated. The Director will determine the specific action(s) that must be taken to implement

stabilization, including the schedule for implementing the stabilization requirements, and will inform the Permittee of the required action(s) in writing.

- d. If at any time, the Permittee determines that the stabilization activities or interim measures are not controlling or abating the threat or effectively minimizing or preventing the further spread of contamination, the Permittee must notify the Director in writing no later than ten (10) calendar days after such a determination is made. The Director may then require that the stabilization activities or interim measures be revised to make them more effective; or that final corrective measures be implemented to remediate the contaminated media.
- e. The Permittee shall continue to operate and maintain the groundwater management system in existence as of the date of this permit. This groundwater management is based in part on revised interim measures requirements identified in EPA correspondence with the Permittee from October 2001 through December 2001, February 2002 through April 2002 and both the facility 2006 QAPP and Addendum. Operation and maintenance of the groundwater management system shall continue until the Director advises the Permittee that results of the RCRA Facility Investigation described hereafter require modifications to or replacement of the existing groundwater management system or additional corrective action supplementing the existing groundwater management system or other corrective measures alternatives.
- f. EPA acknowledges that the Occidental Chemicals facility does not own or operate the Abbott, Air Products, Kansas Gas Energy and Westar water wells or monitor wells. However, Occidental Chemicals must continue to sample these wells since there is offsite contamination at these facilities that can be attributed to the Permittee. Occidental Chemicals must notify EPA in writing if the above well owners prevent Occidental from continued access and sampling of these wells. The Permittee shall continue to take groundwater samples from the Abbott, Air Products, Kansas Gas Energy and Westar wells being monitored as of the date of this permit. The Permittee shall monitor these wells, which are located on properties adjacent to or nearby the Permittee's facility, at the same frequency and for the same constituents as required in Permit Condition C.5.e. If groundwater monitoring or other information indicates that the areal extent of groundwater contaminants attributable to the Permittee may be

expanding with respect to the wells, the Director may impose additional monitoring or interim measure requirements under this permit condition.

C.6. RFI Work Plan

- a. The Permittee has submitted RFI Work Plans to the Director to address both on-site and off-site contamination from facility SWMUs/AOCs. The RFI Work Plans were submitted to comply with permit requirements to investigate releases of hazardous waste, including hazardous constituents, to the environment. If any additional SWMUs/AOCs or any new releases of hazardous waste or hazardous constituents are identified pursuant to Permit Conditions C.3 and C.4 above, then the Director may require the Permittee to submit additional RFI Work Plans to address such SWMUs/AOCs or release. Any additional RFI Work Plans required to be submitted will be within 90 calendar days of notification from the Director to submit such plans. Note: The new AOCs added to the permit (all railroad tracked areas in process areas and railroad corridor along with the facility transportation fueling depot [southern edge from Ridge Road to the eastern boundary must be investigated]) must be included in the onsite RFI Work Plan.
- b. RFI Work Plan(s) shall describe the objectives of the investigation and the overall technical and analytical approach to completing all actions necessary to characterize the nature, vertical and horizontal extent, migration rate, direction of movement and concentration of releases of hazardous waste including hazardous constituents from specific SWMUs or groups of SWMUs, and their actual or potential receptors. Additionally, the RFI Work Plan(s) shall describe collection of any other pertinent data which can be used to substantiate future corrective action decisions. The RFI Work Plan(s) shall at a minimum include in detail all proposed activities and procedures to be conducted at the facility; a description of current conditions; the schedule for implementing and completing such investigations and for submitting reports including the final RFI report; the qualifications of personnel performing or directing the investigations including contractor personnel; and the overall management of the RFI.
- c. The RFI Work Plan(s) shall be consistent with the most recent version of the EPA document entitled, RCRA Interim Facility Investigation Guidance; EPA 530/SW-89-031, OSWER Directive 9502.00-6D.

- d. The RFI Work Plan(s) was submitted in February 2006 and included a Quality Assurance Project Plan (QAPP). Once an Onsite RFI Work Plan with QAPP Addendum is approved, this QAPP Addendum will become part of the RFI. The QAPP shall present the policies, organization, objectives, functional activities, and specific quality assurance and quality control activities designed to achieve the data quality goals of the RFI. It shall include the RFI objectives, sampling procedures, analytical methods, field and laboratory quality control samples, chain-of-custody procedures and data review, validation and reporting procedures. The Permittee shall comply with the QAPP in sampling and analysis procedures. This EPA approved QAPP will satisfy this requirement unless future sampling events i.e. Appendix 8 and 9 soils and groundwater sampling indicate a need for revisions.
- e. The Permittee shall prepare and maintain a health and safety plan during the project that assures the RFI activities are conducted in a manner that is not harmful to human health or the environment.
- f. Due to the complexity of defining the extent of contamination, the Permittee may be required to use a phased approach which requires the submittal of supplemental RFI Work Plans.
- g. The RFI Work Plan(s) shall be reviewed in accordance with the procedures set forth in the Part II Permit Condition C.14. Upon approval thereof, the Permittee shall implement the Work Plan(s) in accordance with the schedule(s) contained therein.
- h. The Permittee shall continue to implement any RFI Work Plans approved by EPA. Future RFI Work Plans will be reviewed and approved in accordance with the procedures set forth in Permit Condition C.14. Upon approval thereof by EPA, the Permittee shall implement the work plans in accordance with the schedules contained therein.

C.7. RFI Reports

- a. As of the date of this permit, the Permittee has submitted to the Director a RFI report for the investigations conducted pursuant to the off-site RFI Work Plan submitted under Permit Condition C.6 herein. The facility's draft Onsite RFI Work Plan which was submitted in February 2006 indicated that it's investigation focus was only on the shallow vadose

zone.

- b. The Permittee shall submit additional RFI Reports according to the schedule contained in the RFI Work Plan. The RFI reports shall present all information gathered under the approved RFI Work Plan along with a brief facility description and map showing the property boundary and all SWMUs. The information presented in the RFI reports shall be presented in a form that is consistent with Section 5 of the most recent version of the EPA publication entitled, RCRA Facility Investigation Guidance; EPA 530/SW-89-031, OSWER Directive 9502.00-6D.
- c. The RFI Reports shall provide an interpretation of the RFI information gathered, supported with sound documentation, to enable the Director to determine whether stabilization and/or a Corrective Measures Study may be necessary. The RFI Report shall describe the procedures, methods, and results of all investigations of SWMUs and their releases, and all stabilization activities undertaken and the results of those activities.
- d. The RFI Reports shall be certified by an independent professional engineer registered in Kansas and shall be submitted by certified mail. The engineer will provide certification that the investigation was conducted in accordance with the approved RFI Work Plans.
- e. The RFI Reports will be reviewed in accordance with the procedures set forth in the Part II Permit Condition C.14. After review of the RFI Reports, if the Director determines that the objectives of the RFI have not been met, the Director may require additional investigation.

C.8. Corrective Measures Study (CMS) Work Plan

- a. Based on review of the groundwater monitoring data provided to the Director, the Director has determined that hazardous wastes and/or hazardous constituents have been released at the facility. These releases may present a threat to human health or the environment. As of the date of this permit, the Permittee has developed a CMS Work Plan for off-site groundwater contamination. The off-site CMS Work Plan dated January 23, 1996 has been previously approved by EPA. Since this document was submitted in 1996 new information has been received by EPA. The EPA has conveyed in it's draft Onsite RFI Work Plan comments and in meetings with the Permittee that the Permittee must perform source

removal of hazardous waste constituents in the groundwater that continue to be present in both onsite and offsite facility wells. The Permittee must investigate additional remediation technologies that will help to reduce the source areas of contamination emanating from the facility. Approved CMS Work Plans addressing on-site and off-site contamination (the off-site CMS Work Plan is old and outdated) are still required.

- b. The Permittee shall submit three (3) copies of the CMS Work Plan to the Director within ninety (90) calendar days of notification of the requirement to submit a CMS Work Plan. The CMS Work Plan shall describe all the investigations, studies and other work necessary to select a corrective measure or measures to protect human health and the environment from releases of hazardous wastes and hazardous constituents. Corrective measures described in the CMS Work Plan may include measures that incorporate engineering or institutional controls subject to EPA's approval. The CMS Work Plan shall be consistent with the most recent version of the EPA guidance document entitled, RCRA Corrective Action Plan; EPA/EC-G-2002-100, OSWER Directive 9902.3-2A. At a minimum, the CMS Work Plan shall provide the following information:

- (1) A description of the general approach to investigating and evaluating potential remedies;
- (2) A definition of the specific objectives of the study;
- (3) A description of the corrective measures which will be studied;
- (4) A description of the method to be used to evaluate corrective measures. At a minimum, each corrective measure studied shall be evaluated using four "threshold criteria" and five "balancing criteria."

To be selected as a corrective measure for the Facility, the corrective measure must meet the following threshold criteria:

- a) - Protection of human health and the environment;
- b) Attainment of media cleanup standards set by, or risk-based standards approved by, EPA;
- c) Controlling the sources of releases to reduce or eliminate

further releases that may pose a threat to human health and the environment, and

- d) Compliance with applicable standards for management of wastes.

A corrective measure is selected from those meeting the threshold criteria based upon the following balancing criteria:

- a) Long-term reliability and effectiveness;
- b) Reduction of toxicity, mobility or volume of wastes;
- c) Short-term effectiveness;
- d) Implementability; and
- e) Cost.

- (5) The schedules for conducting the study and submitting a CMS Report; and

- (6) The proposed format for the presentation of information in the CMS Report. The format for the CMS Report shall include at a minimum:

- (a) Introduction/Purpose;
- (b) Description of Current Conditions;
- (c) Media Cleanup Standards;
- (d) Identification, Screening, and Development of Corrective Measures Alternatives;
- (e) Evaluation of a Final Corrective Measures Alternative;
- (f) Recommendation by Permittee for a Final Corrective Measure Alternative; and
- (g) Public Involvement Plan.

- c. The Director may require the Permittee to evaluate as part of the CMS one or more specific potential remedies. These remedies may include a

specific technology or combination of technologies that, in the EPA's judgment, achieves protection of human health and the environment.

- d. The Director will review the CMS Work Plan in accordance with the procedures set forth in the Part II Permit Condition C.14. Upon approval thereof, the Permittee shall implement the work plan in accordance with the schedule contained therein.

C.9. Corrective Measures Study Report (CMS Report)

- a. The Permittee submitted to EPA a CMS report presenting the information gathered under the CMS plan for off-site groundwater contamination. The CMS report dated July 25, 1997 was disapproved by EPA on October 17, 2000.
- b. The Permittee shall submit three (3) copies of the CMS Report(s) as requested by EPA and according to the schedule(s) contained in approved CMS Work Plan(s). The CMS Report(s) shall present all information gathered under the approved CMS Work Plan(s) and shall be consistent with the most recent version of the EPA guidance document entitled, RCRA Corrective Action Plan, EPA/EC-G-2002-100, OSWER Directive 9902.3-2A. The CMS Report shall summarize the results of the investigations for each remedy studied and of any bench-scale or pilot tests conducted and shall propose a remedy. The CMS Report shall include, but not be limited to, the following information:
 - (1) Evaluation of performance, reliability, ease of implementation, and potential impacts of each remedy studied, including safety impacts, cross-media impacts, and control of exposure to any residual contamination.
 - (2) Assessment of the effectiveness of each remedy in achieving adequate control of sources and cleanup of the hazardous waste or constituents released from SWMUs.
 - (3) Assessment of the time required to begin and complete each remedy.
 - (4) Estimation of the costs for implementing each remedy.

- (5) Recommendation of remedy and rationale for selection.
 - (6) Assessment of institutional requirements such as State or local permit requirements, or other environmental or public health requirements which may substantially affect implementation of the remedy.
 - (7) Technically sufficient information to support the Director in the remedy selection decision making process.
- c. The CMS Report must contain adequate information for the Director to select the corrective measure(s) necessary to protect human health and the environment from releases of hazardous wastes and hazardous constituents at or from the Facility.
 - d. The CMS Report will be reviewed in accordance with the procedures set forth in the Part II Permit Condition C.14.

C.10. Corrective Measures Selection

The Director will select corrective measures that will (1) be protective of human health and the environment; (2) control the source(s) of release(s) so as to reduce or eliminate, to the maximum extent practicable, further releases that may pose a threat to human health and the environment; and (3) meet all applicable federal, state, and local laws and regulations. After the Director prepares a Final Remedy Decision that identifies the preferred corrective measure or measures, and describes the reasons for their preference, a permit modification will be initiated pursuant to 40 CFR §270.41 or §270.42 Class 3, as applicable, to require implementation of corrective measures.

C.11. Corrective Measures Implementation

Reserved

C.12. Financial Assurance for Corrective Action

- a. Estimated Cost of the Work.

Within thirty (30) days after this permit has been modified to include a CMI, the Permittee shall submit to EPA detailed written estimates, in

current dollars, of the cost of performing the work to complete the remedy in accordance with any work plans approved pursuant to C.14. below, including any long term costs, such as operation and maintenance costs and monitoring costs.

For work already underway (semi-annual groundwater sampling) for which the Permittee has not yet submitted an Estimated Cost of Work, the Permittee shall submit such estimates within thirty (30) days of issuance of this permit.

In the event that any additional work plans are required, the Permittee shall submit detailed cost estimates concurrently with the work plans for EPA review and approval.

- b. The Permittee shall annually adjust the Estimated Cost of the Work for inflation on or before March 31st of every year until the work required by this permit is completed. In addition, the Permittee shall adjust the Estimated Cost of the Work if EPA determines that any additional work is required, or if any other condition increases the cost of the work to be performed under this permit.
- c. The Permittee shall demonstrate that the Permittee has established financial assurances, for the benefit of EPA, in the amount of the most recent Estimated Cost of the Work. Permittee may use one or more of the financial assurance forms generally described in Permit Conditions C.11.c.1 through C.11.c.6. below. The Permittee shall annually adjust the amount of the financial assurance provided to cover any increases in the Estimated Cost of the Work.
 - (1) A trust fund established for the benefit of EPA, administered by a trustee who has the authority to act as a trustee under Federal or State law and whose trust operations are regulated and examined by a Federal or State agency, and that is acceptable in all respects to the EPA. The trust agreement shall provide that the trustee shall make payments from the fund as the Regional Administrator shall direct in writing (1) to reimburse Permittee from the fund for expenditures made by Permittee for Work performed in accordance with this permit, or (2) to pay any other person whom the Regional Administrator determines has performed or will perform the work in accordance with this permit. The trust agreement shall further

provide that the trustee shall not refund to the grantor any amounts from the fund unless and until EPA has advised the trustee that the Work under this permit has been successfully completed.

- (2) A surety bond unconditionally guaranteeing performance of the Work in accordance with this permit, or guaranteeing payment at the direction of EPA into a standby trust fund that meets the requirements of the trust fund in Permit Condition C.11.c.1 above. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal Bonds as set forth in Circular 570 of the U.S. Department of the Treasury.
- (3) One or more irrevocable letters of credit, payable at the direction of the Regional Administrator, into a standby trust fund that meets the requirements of the trust fund in Permit Condition C.11.c.1 above. The letter(s) of credit must be issued by one or more financial institution(s): (i) that has the authority to issue letters of credit; and (ii) whose letter-of-credit operations are regulated and examined by a Federal or State agency.
- (4) A policy of insurance that (i) provides EPA with acceptable rights as a beneficiary thereof; and (ii) is issued by an insurance carrier (a) that has the authority to issue insurance policies in the applicable jurisdiction(s), and (b) whose insurance operations are regulated and examined by a Federal or State agency. The insurance policy must be issued for a face amount at least equal to the current Estimated Cost of the Work to be performed under this permit, except where costs not covered by the insurance policy are covered by another financial assurance instrument. The Policy must provide that the insurer shall make payments as the Regional Administrator shall direct in writing to reimburse Permittee for expenditures made by Permittee for Work performed in accordance with this permit, or to pay any other person whom the Regional Administrator determines has performed or will perform the Work in accordance with this permit, up to an amount equal to the face amount of the policy. The policy shall also provide that it may not be canceled, terminated or non-renewed and the policy shall remain in full force and effect in the event that (i) the Permittee is named as a debtor in a voluntary or involuntary bankruptcy proceeding under USC Title 11; or (ii) EPA notifies the insurer of

the Permittee's failure to perform under Permit Condition C.11.f of this section.

- (5) A corporate guarantee, executed in favor of the EPA by one or more of the following: (i) a direct or indirect parent company, or (ii) a company that has a "substantial business relationship" with Permittee (as defined in 40 C.F.R. § 264.141(h)), to perform the Work in accordance with this permit or to establish a trust fund as permitted by Permit Condition C.11.c.1 above; provided, however, that any company providing such a guarantee must demonstrate to the satisfaction of the EPA that it satisfies the financial test requirements of 40 C.F.R. § 264.143(f) with respect to the Estimated Cost of the Work that it proposes to guarantee; or
 - (6) A demonstration by the Permittee that the Permittee meets the financial test criteria of 40 C.F.R. § 264.143(f) with respect to the Estimated Cost of the Work, provided that all other requirements of 40 C.F.R. § 264.143(f) are satisfied.
- d. Any and all financial assurance instruments provided pursuant to this permit must be satisfactory in form and substance as determined by EPA.
- e. In addition, any and all financial assurance instruments provided pursuant to Permit Conditions C.12.c.2, C.12.c.3, C.12.c.4, or C.12.c.5. shall be automatically renewed at the time of their expiration unless the financial assurance provider as notified both the Permittee and the EPA Project Officer at least one hundred and twenty (120) days prior to the expiration, cancellation or termination of the instrument of a decision to cancel, terminate or not renew a financial assurance instrument. Under the terms of the financial assurance instrument, the one hundred and twenty days will begin to run with the date of receipt of the notice by both the EPA Project Officer and the Permittee. Furthermore, if Permittee has failed to provide alternate financial assurance and obtain written approval for such alternate financial assurance within ninety days following receipt of such notice by both Permittee and the EPA Project Officer, then the EPA Project Officer will so notify the financial assurance provider in writing prior to the expiration of the instrument, and the financial assurance provider shall immediately deposit into the standby trust fund, or a newly-created trust fund approved by EPA, the remaining funds obligated under

the financial assurance instrument for the performance of the work in accordance with this permit.

f. Performance Failure

- (1) In the event that EPA determines that Permittee has: (i) ceased implementation of any portion of the work; (ii) is significantly or repeatedly deficient or late in its performance of the Work, or (iii) is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA may issue a written notice (Performance Failure Notice) to Permittee and to the financial assurance provider of Permittee's failure to perform. The notice issued by EPA will specify the grounds upon which such a notice was issued and will provide the Permittee with a period of ten days within which to remedy the circumstances giving rise to the issuance of such notice.
- (2) Failure by the Permittee to remedy the relevant Performance Failure to EPA's satisfaction before the expiration of the ten-day notice period shall trigger EPA's right to have immediate access to and benefit of the financial assurance provided pursuant to Permit Condition C.12.c above. EPA may at any time thereafter direct the financial assurance provider to immediately (i) deposit into the standby trust fund, or a newly created trust fund approved by EPA, the remaining funds obligated under the financial assurance instrument, or (ii) arrange for performance of the work in accordance with this permit.

g. Modification of Amount and/or Form of Performance Guarantee

- (1) Reduction of Amount of Financial Assurance. If the Permittee believes that the estimated cost to complete the remaining work has diminished below the amount covered by the existing financial assurance provided under this permit, the Permittee may, at the same time that Permittee submits the annual cost adjustment pursuant to Permit Condition C.12.b above, or any other time, agreed to by EPA, submit a written proposal to EPA to reduce the amount of the financial assurance provided under this permit so that the amount of the financial assurance is equal to the estimated cost of the remaining work to be performed. The written proposal

shall specify, at a minimum, the cost of the remaining work to be performed and the basis upon which such cost was calculated. In seeking approval of a revised financial assurance amount, Permittee shall follow the procedures set forth in Permit Condition C.12.g.2 below. If EPA decides the proposed reductions are appropriate, EPA will notify Permittee of its determination in writing. After receiving EPA's written determination, Permittee may reduce the amount of the financial assurance only in accordance with and to the extent permitted by such written decision..

- (2) **Change in Form of Financial Assurance.** If Permittee desires to change the form or terms of financial assurance, Permittee may, at the same time that Permittee submits the annual cost adjustment pursuant to Permit Condition C.12.b above, or at any other time agreed to by EPA, submit a written proposal to EPA to change the form of financial assurance. The submission of such proposed revised or alternative form of financial assurance shall be as provided below in this permit condition. The decision whether to approve a proposal submitted under this permit condition shall be at EPA's sole discretion.

A written proposal for a revised or alternative form of financial assurance shall specify, at a minimum, the cost of the remaining Work to be performed, the basis upon which such cost was calculated and the proposed revised form of financial assurance, including all proposed instruments or other documents required in order to make the proposed financial assurance legally binding. The proposed revised or alternative form of financial assurance shall satisfy all requirements set forth or incorporated by reference in this Section. EPA shall notify Permittee in writing of its decision to accept or reject a revised or alternative form of financial assurance submitted pursuant to this permit condition. Within ten days after receiving a written decision approving the proposed revised or alternative financial assurance, Permittee shall execute and/or otherwise finalize all instruments or other documents required in order to make the selected financial assurance legally binding in a form substantially identical to the documents submitted to EPA as part of the proposal, and such financial assurance shall be fully effective. Permittee shall submit

all executed and/or otherwise finalized instruments or other documents required in order to make the selected financial assurance legally binding to the EPA Regional Financial Management Officer within thirty days of receiving a written decision approving the proposed revised or alternative financial assurance with a copy to the EPA Project Officer. The EPA will then release, cancel or terminate the prior existing financial assurance instruments only after Permittee has submitted all executed and/or otherwise finalized new financial assurance instruments or other required documents to EPA.

- (3) Release of Financial Assurance. Permittee may submit a written request to the Regional Administrator to release Permittee from the requirement to maintain financial assurance under this permit upon completion of all work required under this permit. The Regional Administrator or his delegatee will notify both the Permittee and the provider(s) of the financial assurance that Permittee is released from all financial assurance obligations under this permit. Permittee shall not release, cancel or terminate any financial assurance provided pursuant to this section except as provided in this permit condition or Permit Condition C.12.g.2.

C.13. Quarterly Progress Reports

The Permittee shall submit to the Director a signed Quarterly Progress Report covering all activities within the current reporting period which are conducted pursuant to the corrective action provisions of Part II of this permit. Each Quarterly Progress Report shall be due thirty (30) calendar days after the last day of each calendar quarter. These Quarterly Progress Reports shall be submitted until such time that the activities pursuant to the corrective action provisions of Part II of this permit are complete. The Quarterly Progress Reports shall include the following information for the quarter being reported:

- a. A description of the work completed;
- b. Summaries of all findings, including summaries of laboratory data;
- c. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems; and

- d. Projected work for the next quarter.
- e. Any instances of noncompliance with Part II of this permit not otherwise required to be reported pursuant to Permit Condition B.18.

C.14. Review and Approval Procedures

- a. After submission of any plan or report pertaining to corrective action activities (excluding the Quarterly Progress Report), the Director can either approve or disapprove the plan or report in writing. If approved the Permittee shall implement all plans according to the schedule contained in the approved plan.
- b. If the Director disapproves the plan or report, the Director will notify the Permittee in writing of the plan's deficiencies and specify a due date for submittal of a revision.
- c. If the Director disapproves the revised plan or report, the Director may modify the plan or report, and will notify the Permittee of any modifications, or direct the Permittee to correct the deficiencies. The plan or report, as modified by the Director, is the approved plan or report.
- d. If the Permittee takes exception to the modifications made by the Director, the Permittee shall follow the procedures outlined in the Part II Permit Condition entitled, "Dispute Resolution."

C.15. Dispute Resolution

- a. If the Permittee disagrees, in whole or in part, with any EPA disapproval, modification, or other decision or directive made by EPA pursuant to the corrective action provisions of Part II of this permit, the Permittee shall notify the EPA in writing of any objections and basis for them within fifteen (15) calendar days of receipt of EPA's disapproval, decision, or directive. The notice shall set forth specific points of the dispute, the position the Permittee maintains should be adopted as consistent with the requirements of Part II of this permit, the factual and legal basis for the Permittee's position, and all matters the Permittee considers necessary for the EPA's determination. The EPA and the Permittee shall then have an additional thirty (30) calendar days from the EPA's receipt of the Permittee's objection to attempt to resolve the dispute. If agreement is reached, the resolution will be reduced to writing by EPA and shall

become part of Part II of this permit. If the parties are unable to reach complete agreement within this 30-day period, the matter will be submitted for resolution to the Director. This resolution shall become an enforceable part of Part II of this permit. The Director shall notify the Permittee in writing of the resolution of the dispute, and the reasons for this resolution.

- b. The existence of a dispute as defined herein and EPA's consideration of such matters as placed in dispute shall not excuse, toll or suspend any obligation or deadline required pursuant to Part II of this permit, that is not the subject of dispute, during pendency of the dispute resolution process.

D. FACILITY-SPECIFIC CONDITIONS

D.1. Waste Minimization

- a. Pursuant to 40 CFR §264.73(b)(9), and Section 3005(h) of RCRA, 42 USC 6925(h), the Permittee must record and maintain in the facility operating record, at least annually, a waste minimization certification. This certification shall include all waste minimization activities planned and/or implemented during the previous calendar year.
- b. This certification must specify that the Permittee has a program in place to reduce the volume and toxicity of all hazardous waste and/or hazardous constituents which are generated by the facility's operation to the degree determined by the Permittee to be economically practicable; and that the proposed method of treatment, storage or disposal is the practicable method currently available to the Permittee which minimizes the present and future threat to human health and the environment. The certification and supporting documents shall be located in a centralized area within the same building at the permitted facility.
- c. Within one hundred and fifty (150) calendar days of the effective date of Part II of this permit, the Permittee shall submit a Waste Reduction Report. This report shall include the waste minimization certification and supporting documents and a waste reduction impact statement, as defined below.
- d. The waste reduction impact statement shall include:
 - (1) An identification of the annual amount and types of hazardous wastes and/or hazardous constituents that are generated;
 - (2) An identification of the source of generation of hazardous wastes and/or hazardous constituents for each waste stream;
 - (3) An analysis of technically and economically feasible hazardous waste reduction techniques for the facility, including a description of any techniques that were implemented since 1984, at a minimum; and
 - (4) A program and schedule for implementing the feasible hazardous waste and/or hazardous constituent reduction techniques.

D.2. Land Disposal Restrictions

- a. The Permittee must comply with all regulations implementing the land disposal restrictions required in 40 CFR Part 268. The Permittee also must comply with regulations implementing the land disposal restrictions that are promulgated after the effective date of Part II of this permit, as these requirements are self-implementing provisions of HSWA. The Permittee is not subject to the land disposal restrictions if the applicable treatment standard is met, the waste is exempt under 40 CFR §268.1(c), the waste is subject to a variance, or any other exemption in 40 CFR Part 268 applies.
- b. If allowed in the State RCRA Permit (Part I), the Permittee may store wastes to which the land disposal restriction applies for up to one year unless EPA can demonstrate that such storage was not solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal as provided in 40 CFR §268.50(b). For storage of hazardous waste to which the land disposal prohibition applies beyond one year, however, the Permittee shall bear the burden of proving that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal as provided in 40 CFR §268.50(c).

D.3. Reserved

D.4. Air Emission Standards for Tanks, Containers, and Surface Impoundments (Subpart CC)

- a. The Permittee shall comply with the applicable requirements of 40 CFR Part 264, Subpart CC, as amended October 4, 1996, effective December 6, 1996. (Organic emission control equipment was originally to be installed and operational by December 6, 1996, but a grace period was provided to allow for delayed compliance not later than December 8, 1997.)
- b. The Permittee shall immediately comply with the applicable requirement under 40 CFR Part 265, Subpart CC for each tank, surface impoundment, container/container storage area, and/or miscellaneous unit.

- c. The following information shall be submitted to the Regional Administrator within thirty (30) calendar days of the effective date of this permit:
- (1) For every tank, surface impoundment, container/container storage area, and/or miscellaneous unit, verify or correct "Subpart CC Status/Control Option" information regarding the applicability and chosen control option. Regulatory citations shall be noted for each exemption and/or control option. Also, verify or correct the "Operational Status" for units where Subpart CC controls are or will be implemented.
 - (2) For each tank, surface impoundment, container/container storage area, and/or miscellaneous unit that is exempt from Subpart CC under 40 CFR 264.1080 (b)(5) through Section 264.1080(b)(8), or under 40 CFR 264.1082(c), provide documentation, certifications, analytical data, and/or calculations which support each exemption.
 - (3) For each tank, surface impoundment, container/container storage area, and/or miscellaneous unit for which a control option has been specified, provide applicable Part B information and/or certifications required under 40 CFR 270.27.
 - (4) For each tank, surface impoundment, container/container storage area, and/or miscellaneous unit for which a control option has been specified but for which control equipment is not yet in place and/or operational, provide the schedule of implementation prepared in accordance with 40 CFR 265.1082.
 - (5) The permit will be modified to incorporate information provided pursuant to Permit Condition D.4.c.1., and the Permittee shall subsequently be evaluated for compliance based on the regulatory provisions cited under "Subpart CC Status/Options."
 - (6) The Permittee may request a permit modification in accordance with 40 CFR Part 270 to change the compliance dates specified in Permit Condition D.4.c.

D.5. Management of HSWA Regulated Waste

Pursuant to 40 CFR §261.24 and Sections 3001(g) and (h) of RCRA, 42 USC §§6921(g) and (h), the Permittee may store the HSWA hazardous wastes included in the July 15, 2004 Part A permit application in the units authorized in Part I. These HSWA Regulated Wastes shall be included in the quantities allowed and designated in Part I. The storage, treatment, and/or disposal of the following wastes shall be in accordance with the requirements of Part I.

E. FACILITY SUBMISSION SUMMARY

Table E-1. Summary of the planned reporting requirements pursuant to Part II of this permit.

SUBMISSION REQUIREMENTS	DUE DATE	PERMIT CONDITION
RFI Report	According to the schedule contained in the approved RFI Work Plan	C.7.b
CMS Work Plan	Within 90 calendar days of notification from Director	C.8.b
CMS Report	According to the schedule contained on the approved CMS Work Plan	C.9.b
Financial Assurance for Corrective Action	Within 30 calendar days after the Part II of this permit has been modified to include a remedy	C.12.
Financial Assurance Annual Adjustment	Within 30 calendar days after the close of the Permittee's fiscal year	C.12.b
Quarterly Progress Reports	30 calendar days after the last day of each calendar quarter	C.13
Waste Reduction/Minimization Report	Within 150 calendar days of the effective date of Part II of this permit	D.1.c

Table E-2. Summary of possible reporting requirements pursuant to Part II of this permit.

CONDITIONAL REQUIREMENTS	DUE DATE	PERMIT CONDITION
Permit Renewal Application	180 calendar days prior to Part II permit expiration	B.4.b
Provisions for Part II Permit Transfer	90 calendar days prior to date of Part II permit transfer	B.7
Report Planned Changes and Noncompliance Due to Planned Changes	20 calendar days prior to making any physical alterations to any portion of the facility subject to Part II of this permit	B.18
Report Noncompliance Endangering Health or the Environment.	24 hours from awareness.	B.19.b
Report Other Noncompliance	30 calendar days after discovery.	B.20
Written Notice of Noncompliance	Within 5 calendar days of Permittee's awareness of the circumstance	B.19.d
Written Notification of Newly-Identified SWMUs/AOCs	15 calendar days after discovery	C.3.a
SWMU/AOC Assessment Work Plan	30 calendar days after receipt of Director's request	C.3.b
SWMU/AOC Assessment Report	According to the schedule in the SWMU Assessment Work Plan	C.3.d
Written Notification of Newly-Identified Releases of SWMUs/AOCs	15 calendar days after discovery	C.4.a
Newly-Identified Release Work Plan	30 calendar days after receipt of Director's request	C.4.b

CONDITIONAL REQUIREMENTS	DUE DATE	PERMIT CONDITION
Newly-Identified Release Report	According to the schedule in the Newly-Identified Release Work Plan	C.4.d
Stabilization Notification	Within 24 hours of discovery of need for stabilization	C.5.b
Written Notification that Stabilization is Not Effective	10 calendar days after discovery	C.5.d
RFI Work Plan	Within 90 calendar days of notification from Director	C.6.a
Notification of Decision to Cancel, Terminate, or Not Renew Financial Assurance Instrument	120 calendar days prior to expiration, cancellation, or termination of the instrument	C.12.e
Proposal to Modify the Amount or Form of Financial Assurance	Concurrent with submittal of the annual financial assurance adjustment	C.12.g (1) (2)
Request to Release Financial Assurance	Upon completion of all work required under this permit	C.12.g (3)

E. SWMU/AOC SUMMARY

Table F-1. List of SWMUs/AOCs

Figure F-1. Location Map of SWMUs/AOCs

Table F-1
List of SWMUs/AOCs

AOC/SWMU Identification	Plant Area	SWMU Service Date	Size / Construction	Waste Managed	Comments
Abandoned Piping (Underground)	Site-Wide	1957 - 1977		Manufactured products and waste water lines	Some piping left in place
Accumulation Storage Area - Penta Plant	Penta - BHC	1976 - Current	Approx. 400 sq. ft - Concrete pad with concrete curbing	Pentachlorophenol contaminated wastes	Temporary storage of wastes - Will be closed once plant is completely demolished
Accumulation Storage Area - Chloromethanes I	Chloromethanes I	1976 - 1992	Approx. 400 sq. ft - Concrete pad with concrete curbing	Organic contaminated wastes	Temporary storage of wastes
Accumulation Storage Area - Chloromethanes II	Chloromethanes II	1976 - Current	Approx. 400 sq. ft - Concrete pad with concrete curbing	Organic contaminated wastes	Temporary storage of wastes
Accumulation Storage Area - PCE	PCE	1976 - 1997	Approx. 400 sq. ft - Concrete pad with concrete curbing	Hex and organic contaminated wastes	Temporary storage of wastes - Replaced by VFS
Accumulation Storage Area - Vulcan Feedstock (VFS)	PCE	1996 - 2003	Approx. 400 sq. ft - Concrete pad with concrete curbing	Organic contaminated wastes	Temporary storage of wastes
Accumulation Storage Area - Shipping	Penta - BHC	1976 - Current	Approx. 100 sq. ft - Concrete pad with concrete curbing	Organic waste and organic contaminated filters	Temporary storage of wastes
Air Stripper - acid scrubber	PCE	1976 - 1993		Hydrochloric acid fumes	
Alpha Cake Landfill	Chemical Waste Landfill	1951 - 1977	Approx. 20 acres - clay cap (part of chemical landfill)	BHC material, chlorinated organics, pentachlorophenol and hex wastes	Stopped accepting waste in 1976; Covered in 1977 with compacted clay cap
Asbestos Surface Impoundment	Inorganic	1951 - 1977	35' X 42'	Asbestos	Stopped accepting waste in 1977; Area is to be closed and capped in 2006
Basin #2	PCE	1977 - Current	25' X 13' - approx. 177,000 gallons / corrosion resistant brick	Wastewater impacted with chlorinated organics	Interior was re-coated with chemical resistant coating
Basin #3	Inorganic	1977 - Current	25' X 13' - approx. 177,000 gallons / corrosion resistant brick	Inorganic wastewater	
Brine Ponds	Inorganic	1957 - 1977	approx. 20 acres / clay cap	Inorganic wastes from Solar pond and brine sludge	Currently receives construction debris (non-haz.)
D-2 Brine Sludge Surge Tank	Inorganic	1977 - 1989	< 2000 gallons	Brine sludge	<90 Day Storage/Holding Tank; Tank Removed from Facility.
Deep Disposal Well #1	PCE	1957 - 1961	N/A	Organic & Inorganic impacted wastewater	Well was plugged/abandoned April 1961.

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Table F-1
List of SWMUs/AOCs

AOC/SWMU Identification	Plant Area	SWMU Service Date	Size / Construction	Waste Managed	Comments
Deep Disposal Well #2	Hazardous Waste Storage	1961 - 1973	N/A	Organic & Inorganic impacted wastewater	Well and was plugged/abandoned Jan. 1973.
Deep Disposal Well #3	Inorganic	1966 - Current	N/A	Inorganic impacted wastewater	
Deep Disposal Well #4	Hazardous Waste Storage	1975 - Current	N/A	Inorganic impacted wastewater	
Deep Disposal Well #6	Hazardous Waste Storage	1974 - 1982	N/A	Organic & Inorganic impacted wastewater	Well was plugged/abandoned in 1982.
Deep Disposal Well #7	N/A - Located inside AtoFina (Former) Plant	1977 - Current	N/A	Organic & Inorganic impacted wastewater	
Deep Disposal Well #8	Chloromethanes I	1980 - Current	N/A	Organic & Inorganic impacted wastewater	
Deep Disposal Well #9	Hazardous Waste Storage	1982 - Current	N/A	Organic & Inorganic impacted wastewater	
Deep Disposal Well #10	N/A	2001 - Current	N/A	Non-hazardous material only	
Drainage Ditch - Middle	Surface Water Drainage	1958 - 1977		Organic & BHC Impacted stormwater & process wastewater	In 1977, process area surface water discharge was eliminated
Drainage Ditch - North	Surface Water Drainage	1958 - 1977		Organic impacted stormwater & process wastewater	In 1977, process surface water discharge was eliminated
Drainage Ditch - South	Surface Water Drainage	1958 - 1977		Stormwater & Inorganic process wastewater	In 1977, inorganic process surface water discharge was eliminated
Hazardous Waste Container Storage - Penta	Hazardous Waste Storage	1977 - Current	approx. 20,000 sq ft. (83' X 238') - concrete pad with curbing	Penta contaminated waste storage containers	Will be closed once plant is completely demolished
Hazardous Waste Container Storage - <90 Day Storage	Hazardous Waste Storage	1977 - Current	approx. 1200 sq ft. (60' X 20') - concrete pad with curbing	Liquid hazardous waste storage containers	
Hazardous Waste Container Storage - Solid Waste Container	Hazardous Waste Storage	1977 - Current	approx. 1800 sq ft. (60' X 30') - concrete pad with curbing	Solid hazardous waste storage containers (no liquids)	
Hazardous Waste Container Storage - R&D Laboratory	Research & Development	1977 - Current	approx. 100 sq ft. (10' X 10') - concrete pad with curbing	Hazardous waste from R&D Laboratory	
Hex Incinerator	PCE	1977 - 1997		Hex material from PCE production	Closed 1997
Hex Pot	PCE	1977 - 1997		Hex material from PCE production	Closed 1997

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Table F-1
List of SWMUs/AOCs

AOC/SWMU Identification	Plant Area	SWMU Service Date	Size / Construction	Waste Managed	Comments
Hex Hold Tank	PCE	1977 - 1997		Hex material from PCE production	Closed 1997
Ancillary Piping	PCE	1977 - 1997		Hex material from PCE production	Closed 1997
Hex Oxidizer	PCE	1977 - 1997		Hex material from PCE production	Closed 1997
Waste Heat Boiler	PCE	1977 - 1997		Hex material from PCE production	Closed 1997
Scrubber Tower	PCE	1977 - 1997		Hex material from PCE production	Closed 1997
Hex Waste Pits	Chemical Waste Landfill	1958 - 1977	approx. 20 acres (part of chemical landfill) - clay cap	Hex material from PCE production	Stopped accepting waste in 1976; Covered in 1977 with compacted clay cap
Old Hex Pit Area	Hazardous Waste Storage	1960 - 1970		Hex material from PCE production	Temporary storage prior to transfer to landfill
Interceptor Well #22	Groundwater	1976 - 1993		Groundwater from Remediation system	
Interceptor Well #26	Groundwater	1977 - Unknown		Groundwater from Remediation system	
Interceptor Well #28	Groundwater	1977 - Unknown		Groundwater from Remediation system	
Interceptor Well #29	Groundwater	1991 - Current		Groundwater from Remediation system	
Interceptor Well #30	Groundwater	1986 - Current		Groundwater from Remediation system	
Interceptor Well #31	Groundwater	1978 - Current		Groundwater from Remediation system	
Interceptor Well #32 (new)	Groundwater	1995 - Current		Groundwater from Remediation system	
Interceptor Well #32 (old)	Groundwater	1977 - 1995		Groundwater from Remediation system	Well plugged in 1995
Interceptor Well #33	Groundwater	1977 - 2003		Groundwater from Remediation system	Plugged/Abandoned
Interceptor Well #34	Groundwater	1977 - 2003		Groundwater from Remediation system	Plugged/Abandoned
Interceptor Well #35	Groundwater	1983 - 1991		Groundwater from Remediation system	Plugged/Abandoned
Interceptor Well #35A	Groundwater	1990 - Current		Groundwater from Remediation system	
Interceptor Well #35B	Groundwater	1996 - Current		Groundwater from Remediation system	

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Table F-1
List of SWMUs/AOCs

AOC/SWMU Identification	Plant Area	SWMU Service Date	Size / Construction	Waste Managed	Comments
LP-1	Hazardous Waste Storage	1958 - 1984 1984 - Current	3.3 million gallons	Receives 1st flush stormwater runoff from non-process area & overflow from Surge Tank 437	Closed in 1984. Reactivated to collect storm water runoff from process areas
LP-2	Chloromethanes II	1978 - 1984 1984 - Current	95,000 gallons (0.24 acres) *	Contaminated soil was remediated; Currently receives stormwater from process area and also cooling tower blow down	Closed and re-lined (Hypalon Plastic) in 1984. Reactivated in 1984 as a non-haz waste storage unit
LP-3	Chloromethanes II	1958 - 1984 1984 - Current	80,000 gallons	Receives non-hazardous stormwater runoff only	Closed and re-lined (Hypalon Plastic) in 1984. Reactivated to collect storm water runoff from non-process areas
Solar Pond	Inorganic	1951 - 1971	1.4 acres	Brine sludge and inorganic wastewater. May have received wastewater contaminated with organics from Middle Drainage Ditch	Removed from service in 1971 and closed in 1977
Storm Ponds	Surface Water Drainage	1977 - Current	45 million gallons	Non-process stormwater runoff only	
Sump 405	PCE	1977 - Unknown		Organic process water and stormwater runoff	
Sump 406	Research & Development	1977 - Current	approx. 8,150 gallons (11' X 11' X 9')	Process wastewater from pilot plant and flow from R&D basement tanks	
Sump 407	PCE	1977 - Current	approx. 2,200 gallons (7' X 7' X 6')	Organic process water and stormwater runoff	
Sump 408	PCE	1977 - 1997	approx. 360 gallons (4' X 4' X 3')	Organic process water and stormwater runoff	backfilled and cemented
Sump 409	PCE	1977 - Current	approx. 46,900 gallons (19' X 30' X 11')	Organic process water and stormwater runoff	
Sump 410	PCE	1977 - Current	approx. 3,890 gallons (5' X 13' X 8')	Organic process water and stormwater runoff	
Sump 411	PCE	1977 - Current	approx. 1,345 gallons (6' X 6' X 5')	Organic process water and stormwater runoff	
Sump 412	PCE	1977 - Current	approx. 16,830 gallons (15' X 15' X 10')	Organic process water and stormwater runoff	
Sump 413	PCE	1977 - Current	approx. 3,350 gallons (8' X 8' X 7')	Organic process water and stormwater runoff	
Sump 414	Solvent Drum Storage	1977 - 1995	2' X 2' X Unknown	Organic process water and stormwater runoff	backfilled with gravel
Sump 415	PCE	1977 - 1998	approx. 3,350 gallons (8' X 8' X 7')	Organic process water and stormwater runoff	cleaned, filled with gravel and taken out of service in 1998

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Table F-1
List of SWMUs/AOCs

AOC/SWMU Identification	Plant Area	SWMU Service Date	Size / Construction	Waste Managed	Comments
Sump 417	Hazardous Waste Storage	1975 - 1985 1985 - Current	approx. 27,895 gallons (44.6' X 11' X 10')	Previously used for Hex waste clean-out; Currently used as secondary containment	
Sump 418	Chloromethanes I	1977 - Current	approx. 29,690 gallons (21' X 22' X 8')	Organic process water and stormwater runoff	
Sump 419	Chloromethanes I	1977 - Current	approx. 335 gallons (5' X 3' X 3')	Organic process water and stormwater runoff	
Sump 420	Chloromethanes I	1977 - Current	approx. 750 gallons (5' X 5' X 4')	Organic process water and stormwater runoff	Taken out of hazardous waste service in 1998. Reactivated as non-hazardous
Sump 422	Penta - BHC	1977 - Unknown	approx. 60 gallons (2' X 2' X 2')	Organic process water and stormwater runoff	backfilled and cemented
Sump 423	Penta - BHC	1977 - Unknown	approx. 210 gallons (2.6' X 3' X 3')	Organic process water and stormwater runoff	backfilled and cemented
Sump 424	Penta - BHC	1977 - Current	approx. 16,700 gallons (18.6' x 12' x 10')	Organic process water and stormwater runoff	
Sump 425	Penta - BHC	1977 - Current	approx. 165 gallons (1.8' x 6' x 2')	Organic process water and stormwater runoff	
Sump 426	Penta - BHC	1977 - Current	approx. 2,460 gallons (6.9' x 6.9' x 6')	Organic process water and stormwater runoff	
Sump 427	Penta - BHC	1977 - Current	approx. 8,080 gallons (15' x 8' x 9')	Organic process water and stormwater runoff	
Sump 428	Penta - BHC	1977 - Unknown	approx. 1,345 gallons (6' x 6' x 5')	Organic process water and stormwater runoff	backfilled and cemented
Sump 429	Chloromethanes II	1977 - Current	approx. 31,510 gallons (18' x 18' x 13')	Organic process water and stormwater runoff	
Sump 430	Chloromethanes II	1977 - 2001	approx. 4,490 gallons (10' x 10' x 6')	Organic process water and stormwater runoff	backfilled and cemented
Sump 432	Chloromethanes II	1977 - Current	approx. 5,985 gallons (10' x 10' x 8')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 433	Chloromethanes II	1977 - Current	approx. 28,860 gallons (14' x 26' x 10.6')	Non-hazardous process water and stormwater runoff from Inorganic (may be characteristically hazardous due to pH)	
Sump 434	Chloromethanes II	1977 - Current	approx. 1,420 gallons (5' x 7.6' x 5')	Organic Process wastewater and stormwater runoff	

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Table F-1
List of SWMUs/AOCs

AOC/SWMU Identification	Plant Area	SWMU Service Date	Size / Construction	Waste Managed	Comments
Sump 435	Penta - BHC	1977 - Current	approx. 95,000 gallons (18' x 17.6' x 6')	Non-hazardous process water and stormwater runoff from acid loading (may be characteristically hazardous due to pH)	
Sump 436	Penta - BHC	1977 - Current	approx. 15,620 gallons (12' x 29' x 6')	Non-hazardous process water and stormwater runoff from caustic loading (may be characteristically hazardous due to pH)	Receives storm water runoff from caustic loading area
Sump 438	Hazardous Waste Storage	1978 - Unknown	approx. 89,275 gallons (51' x 18' x 13')	Sump clean-out material (Hex waste)	backfilled and cemented
Sump 439	Inorganic	1977 - Current	approx. 3,815 gallons (6.6' x 8.6' x 9')	Non-hazardous process water and stormwater runoff from Inorganic (may be characteristically hazardous due to pH)	
Sump 441	Inorganic	1977 - Current	approx. 135 gallons (3' x 3' x 2')	Non-hazardous process water and stormwater runoff from Inorganic (may be characteristically hazardous due to pH)	
Sump 443	Inorganic	1977 - Current	approx. 120 gallons (2' x 4' x 2')	Non-hazardous process water and stormwater runoff from Inorganic (may be characteristically hazardous due to pH)	
Sump 444	Inorganic	1977 - Current	approx. 1885 gallons (6' x 6' x 7')	Non-hazardous process water and stormwater runoff from Inorganic (may be characteristically hazardous due to pH)	
Sump 445	Penta - BHC	1977 - Current	approx. 23,405 gallons (8' x 32.6' x 12')	Non-hazardous process water and stormwater runoff from Inorganic (may be characteristically hazardous due to pH)	
Sump 446	Inorganic	1977 - Current	approx. 1,290 gallons (8.6' x 5' x 4')	Non-hazardous process water and stormwater runoff from Inorganic (may be characteristically hazardous due to pH)	

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Table F-1
List of SWMUs/AOCs

AOC/SWMU Identification	Plant Area	SWMU Service Date	Size / Construction	Waste Managed	Comments
Sump 447	Inorganic	1977 - Current	approx. 1,615 gallons (6' x 6' x 6')	Non-hazardous process water and stormwater runoff from Inorganic (may be characteristically hazardous due to pH)	
Sump 448	Inorganic	1977 - Unknown	approx. 6,390 gallons (8' x 12' x 8.9')	Non-hazardous process water and stormwater runoff from Inorganic	backfilled and cemented
Sump 449	Inorganic	1977 - Current	approx. 175 gallons (2.6' x 3' x 3')	Non-hazardous process water and stormwater runoff from Inorganic (may be characteristically hazardous due to pH)	
Sump 450	Inorganic	1977 - Current	approx. 25,470 gallons (16' x 28' x 7.6')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 451	Inorganic	1977 - Current	approx. 5,835 gallons (10' x 13' x 6')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 452	Inorganic	1977 - Current	approx. 14,660 gallons (14' x 14' x 10')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 453	Inorganic	1977 - Current	approx. 23,480 gallons (16' x 18' x 10.9')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 454	Inorganic	1977 - Current	approx. 5984 gallons (10' x 10' x 8')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 455	Inorganic	1977 - Current	approx. 3,230 gallons (9' x 8' x 6')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 456	Inorganic	1977 - Current	approx. 1,255 gallons (12' x 2' x 7')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 457	Inorganic	1977 - Current	approx. 1,615 gallons (6' x 6' x 6')	Non-hazardous process water and stormwater runoff from Inorganic (may be characteristically hazardous due to pH)	
Sump 458	Inorganic	1977 - Current	approx. 1,615 gallons (6' x 6' x 6')	Non-hazardous process water and stormwater runoff from Inorganic	

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Table F-1
List of SWMUs/AOCs

AOC/SWMU Identification	Plant Area	SWMU Service Date	Size / Construction	Waste Managed	Comments
Sump 459	Inorganic	1977 - Current	approx. 9,425 gallons (15' x 12' x 7')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 460	Inorganic	1977 - Current	approx. 1,415 gallons (10' x 3' x 6.3')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 461	Inorganic	1977 - Current	approx. 17,810 gallons (16' x 16' x 9.3')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 462	Inorganic	1977 - Current	approx. 810 gallons (3' x 9' x 4')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 463	Inorganic	1977 - Current	approx. 225 gallons (5' x 3' x 2')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 464	Inorganic	1977 - Current	approx. 26,930 gallons (60' x 10' x 6')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 465	Inorganic	1977 - Current	approx. 26,930 gallons (60' x 10' x 6')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 466	Inorganic	1977 - Current	approx. 26,930 gallons (60' x 10' x 6')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 467	Inorganic	1977 - Current	approx. 5,500 gallons (7' x 21' x 5')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 468	Inorganic	1977 - Current	approx. 825 gallons (4.6' x 8' x 3')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 469	Chemical Waste Landfill	1976 - 2000	approx. 135 gallons (3' x 3' x 2')	Organic process water and stormwater runoff	backfilled with soil and grass covered
Sump 470	Inorganic	1977 - Current	approx. 5,970 gallons (15' x 7.6' x 7')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 473	Chloromethanes II	1977 - Current	approx. 390 gallons (3.6' x 3.6' x 4')	Organic process water and stormwater runoff	
Sump 477	Inorganic	1977 - Current	approx. 5,500 gallons (21' x 5' x 7')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 478	Inorganic	1977 - Current	approx. 5,235 gallons (10' x 10' x 7')	Non-hazardous process water and stormwater runoff from Inorganic	

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Table F-1
List of SWMUs/AOCs

AOC/SWMU Identification	Plant Area	SWMU Service Date	Size / Construction	Waste Managed	Comments
Sump 479	Inorganic	1977 - Current	approx. 315 gallons (4' x 4' x 2.6')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 481	Inorganic	1977 - Current	approx. 3,140 gallons (6' x 10' x 7')	Non-hazardous process water and stormwater runoff from Inorganic	
Sump 484	Inorganic	1977 - Unknown		Non-hazardous process water and stormwater runoff from Inorganic	backfilled and cemented
Sump 501	Chloromethanes II	1977 - Current	approx. 1,175 gallons (5.6' x 5.6' x 5')	Organic process water and stormwater runoff	
Sump 502	Chloromethanes II	1977 - Current	approx. 1,345 gallons (6' x 6' x 5')	Non-hazardous stormwater runoff from Quality Control Laboratory	
Sump 503	Chloromethanes II	1977 - 1999	approx. 1,275 gallons (7.6' x 5.6' x 4')	Prior to 1999: Process waste water. Post 1999: secondary containment & direct rainfall only	Secondary containment for <90 day Haz. Waste Tank
Sump 504	Chloromethanes II	1977 - Current	approx. 6,335 gallons (11' x 11' x 7')	Organic process water and stormwater runoff	Secondary containment for <90 day Haz. Waste Tank
Sump 505	Chloromethanes II	1977 - Current	approx. 390 gallons (3.6' x 3.6' x 4')	Organic process water and stormwater runoff	
Sump 506	Chloromethanes II	1977 - Current	approx. 290 gallons (3.6' x 3.6' x 3')	Organic process water and stormwater runoff	
Sump - Cell Repair	Inorganic	1977 - Current	approx. 2,250 gallons (4.6' x 8.6' x 7.6')	Non-hazardous process water and stormwater runoff from Inorganic	
Tank 38	PCE	1977 - Current	91,000 gallons (30' x 20')	Prior to 2000: Chlorinated organic contaminated waste water and soil. Post 2000: Penta recovery	<90 Day Storage/Holding Tank; Taken out of hazardous waste service in 2000.
Surge Tank 437	Hazardous Waste Storage	1977 - Current	1,300,000 gallon (100' x 24')	Non-hazardous process waste water and non-process stormwater runoff from Inorganic	<90 Day Storage/Holding Tank
Tank 406	Research & Development	1977 - Current		Process water from Pilot Plant and waste water from laboratory sinks	<90 Day Storage/Holding Tank
Tank 415	PCE	1977 - 1999	< 500 gallons	Organic process water and stormwater runoff	Considered non-haz. and disposed of at Brooks Landfill in 1999

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Table F-1
List of SWMUs/AOCs

AOC/SWMU Identification	Plant Area	SWMU Service Date	Size / Construction	Waste Managed	Comments
Tank 416	Hazardous Waste Storage	1977 - Current		Non-hazardous process waste water and non-process stormwater runoff from Inorganic	<90 Day Storage/Holding Tank
Tank 420	Penta - BHC	1977 - 1999	<500 gallons	Organic process water and stormwater runoff	
Tank 424	Penta - BHC	1977 - 1999 1999 - Current	<500 gallons	Organic process water and stormwater runoff	<90 Day Storage/Holding Tank. Original tank cleaned and disposed of at Brooks Landfill in 1999.
Tank 426	Penta - BHC	1977 - 1998	<500 gallons	Organic process water and stormwater runoff	Disposed of in 1998
Tank 503	Chloromethanes II	1977 - 1999	<500 gallons	Organic process water and stormwater runoff	Disposed of in 1999 at Brooks Landfill
Tank 6656	Inorganic	1983 - 2001		Non-hazardous process waste water and non-process stormwater runoff from Inorganic	Disposed off-site
DDF Tank #7	PCE	1977 - Current	25,000 gallons	Organic process water	<90 Day Storage/Holding Tank. Associated with Basin #2 - discharges to deep well #7
DDF Tank #8	PCE	1977 - Current	1400 gallons	Organic process water	<90 Day Storage/Holding Tank. Associated with Basin #2 - discharges to deep well #8
DDF Tank #9	PCE	1977 - Current	1400 gallons	Organic process water	<90 Day Storage/Holding Tank. Associated with Basin #2 - discharges to deep well #9
R&D Hazardous Waste Tanks	Research & Development	1977 - Current	<500 gallons	R&D Laboratory waste water	<90 Day Storage/Holding Tank
R&D Hazardous Waste Tanks	Research & Development	1977 - Current	<500 gallons	R&D Laboratory waste water	<90 Day Storage/Holding Tank
R&D Hazardous Waste Tanks	Research & Development	1977 - Current	<500 gallons	Pilot Plant process waste water	<90 Day Storage/Holding Tank
Waste Asbestos Handling	Inorganic	1958 - Current		Asbestos from the regeneration of diaphragm and	
Transportation Fuel Storage Area		1990's - Current		TPH-DRO & TPH-GRO	
All Rail Road Tracks in Process Areas & RR Corridor North to South		1950's - Current		All past & present products & wastes	

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WICHITA PLANT MAP

DESIGNED BY:	DETAILED BY:	CHECKED BY:
	RHW	ESH

DRAWING DATE: 02/08/02	ACAD FILE: BASE1
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PROJECT NO.:	CONTRACT:
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DRAWING:  REVISION:

FIGURE 1

☒ SUMP
☐ DISPOSAL WELL
☐ INTERCEPTOR WELLS (IW)
☐ TANK
 ----- CLOSED SWMUs
 ----- ACTIVE SWMUs